

# HINDALCO

## Hindalco Industries Limited

*An emerging regional metals major*

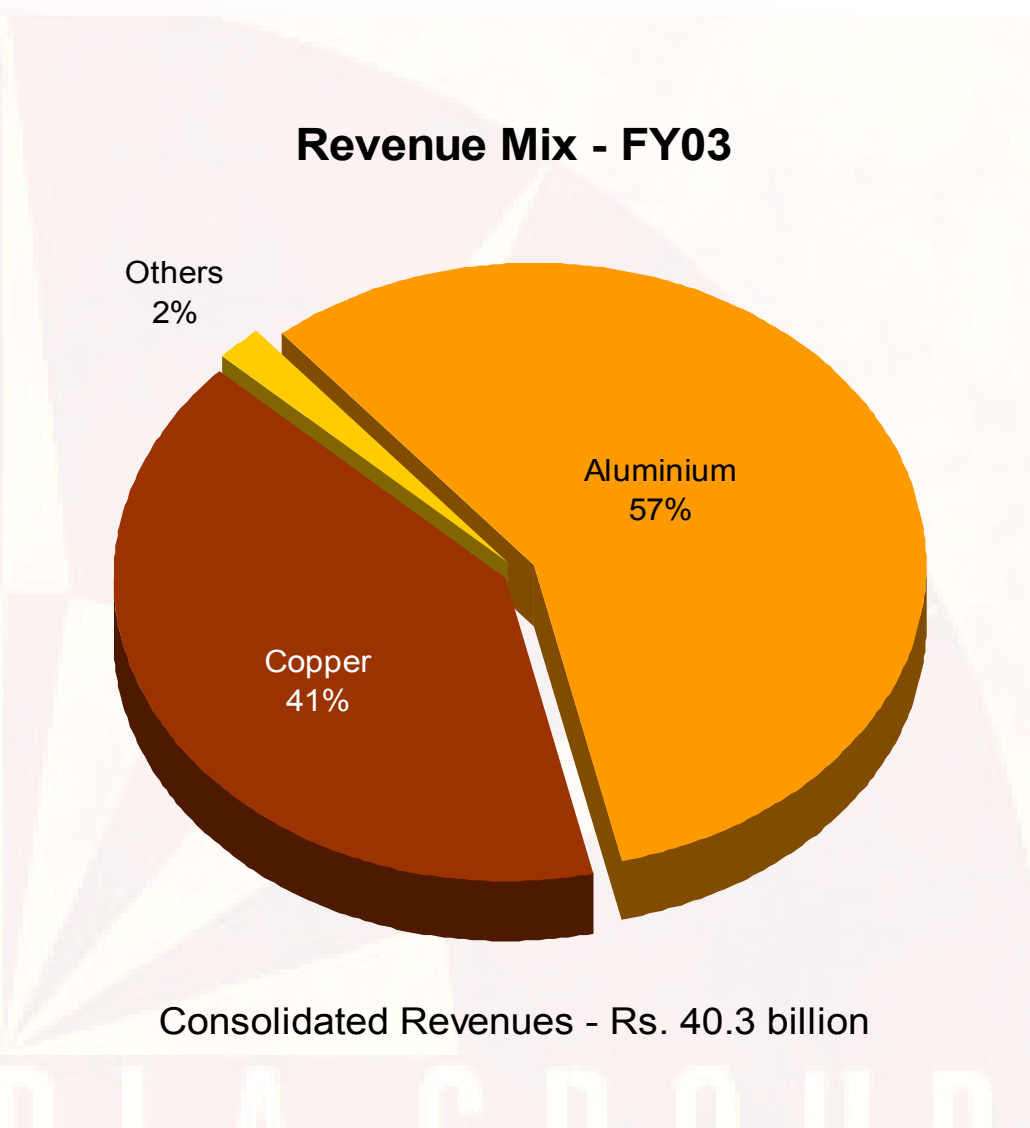
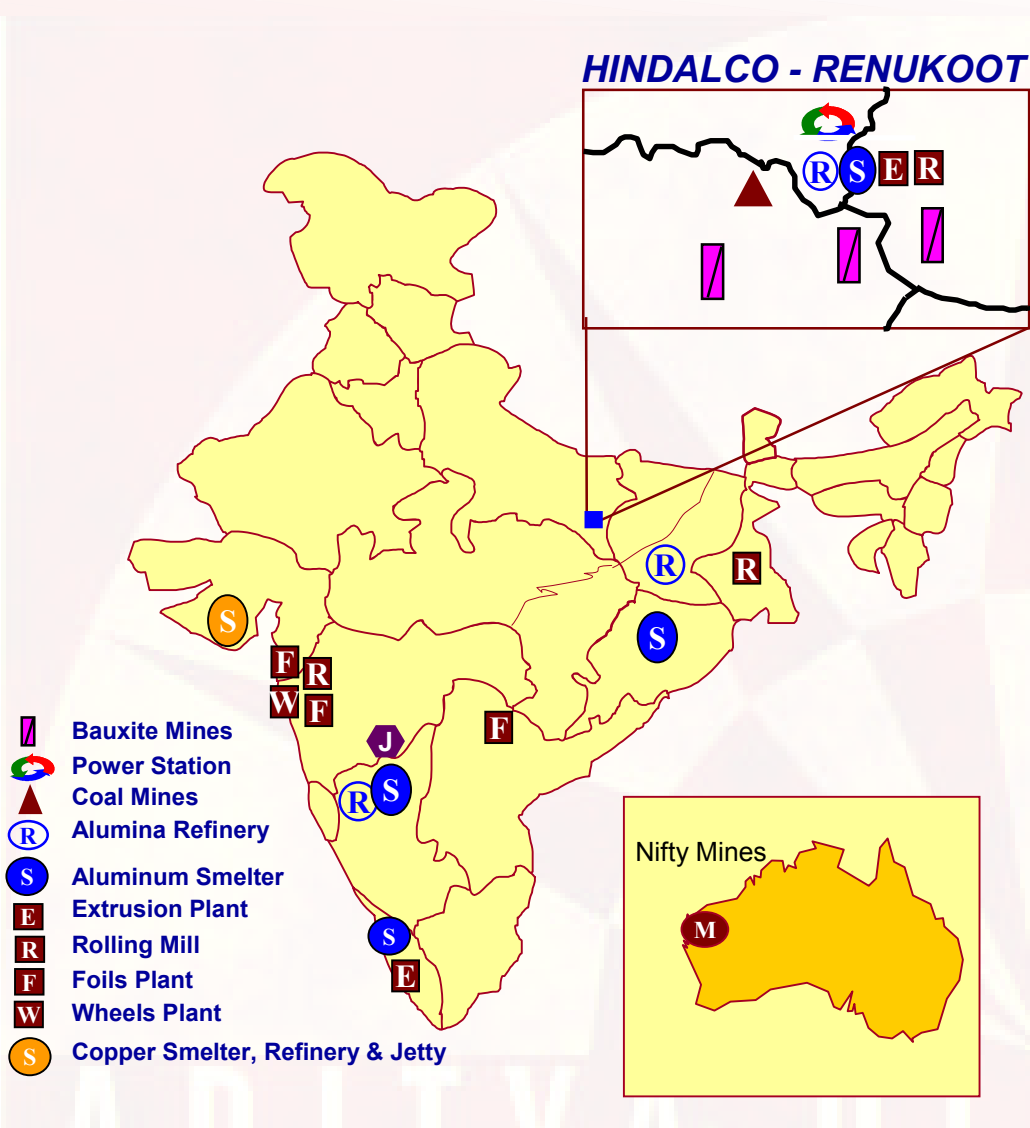
*CLSA Investor Forum 2003, Hong Kong  
September 2003*

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# Investment highlights

- Domestic market leader
- Globally competitive cost structure
- Significant strategic strengths backing benchmark efficiencies
- Entering higher growth trajectory with sustainable growth momentum
- Valuations yet to reflect the changing growth profile

# An Introduction



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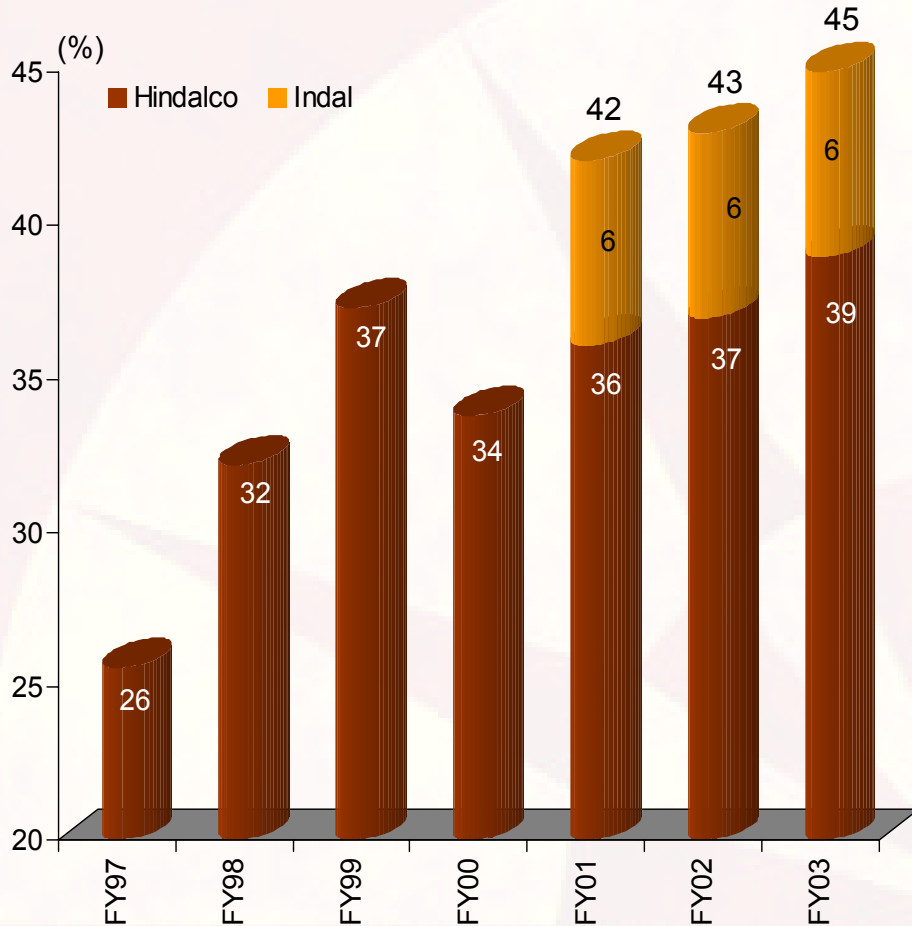
# Aluminium Business

*- On a solid foundation*

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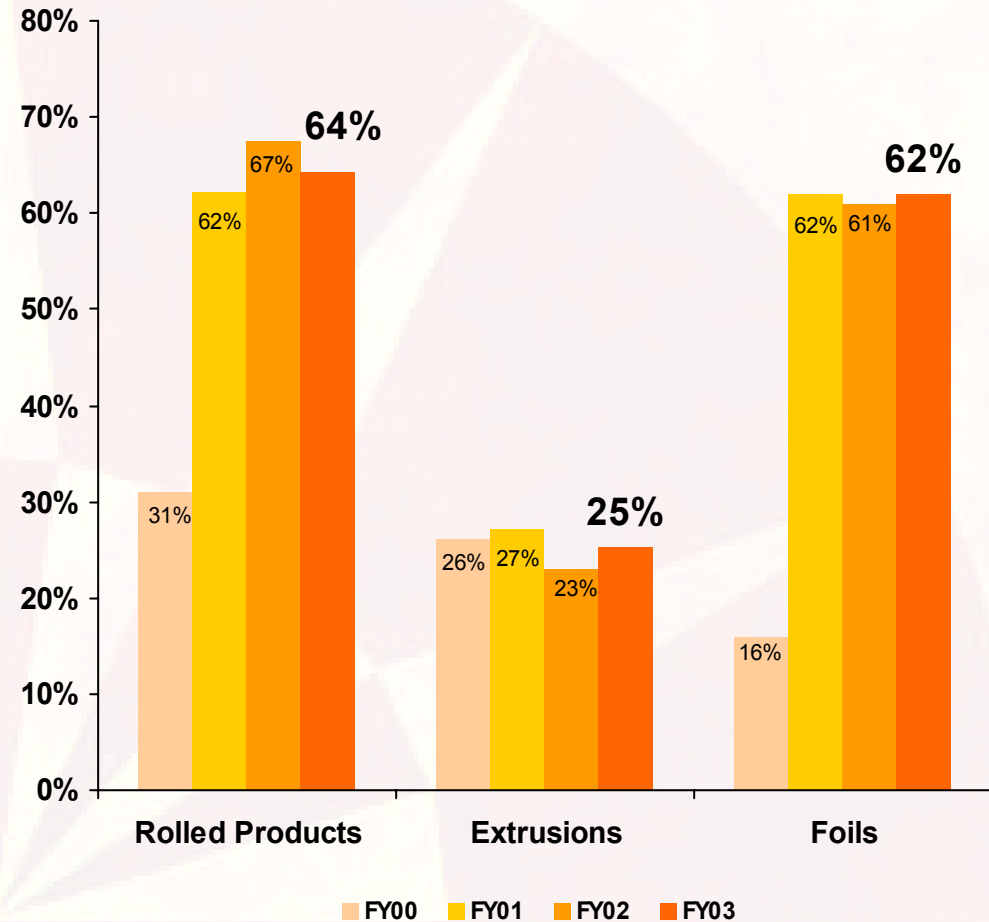
# Domestic market leader

## Market Share - Primary Metal



Source: Company Data

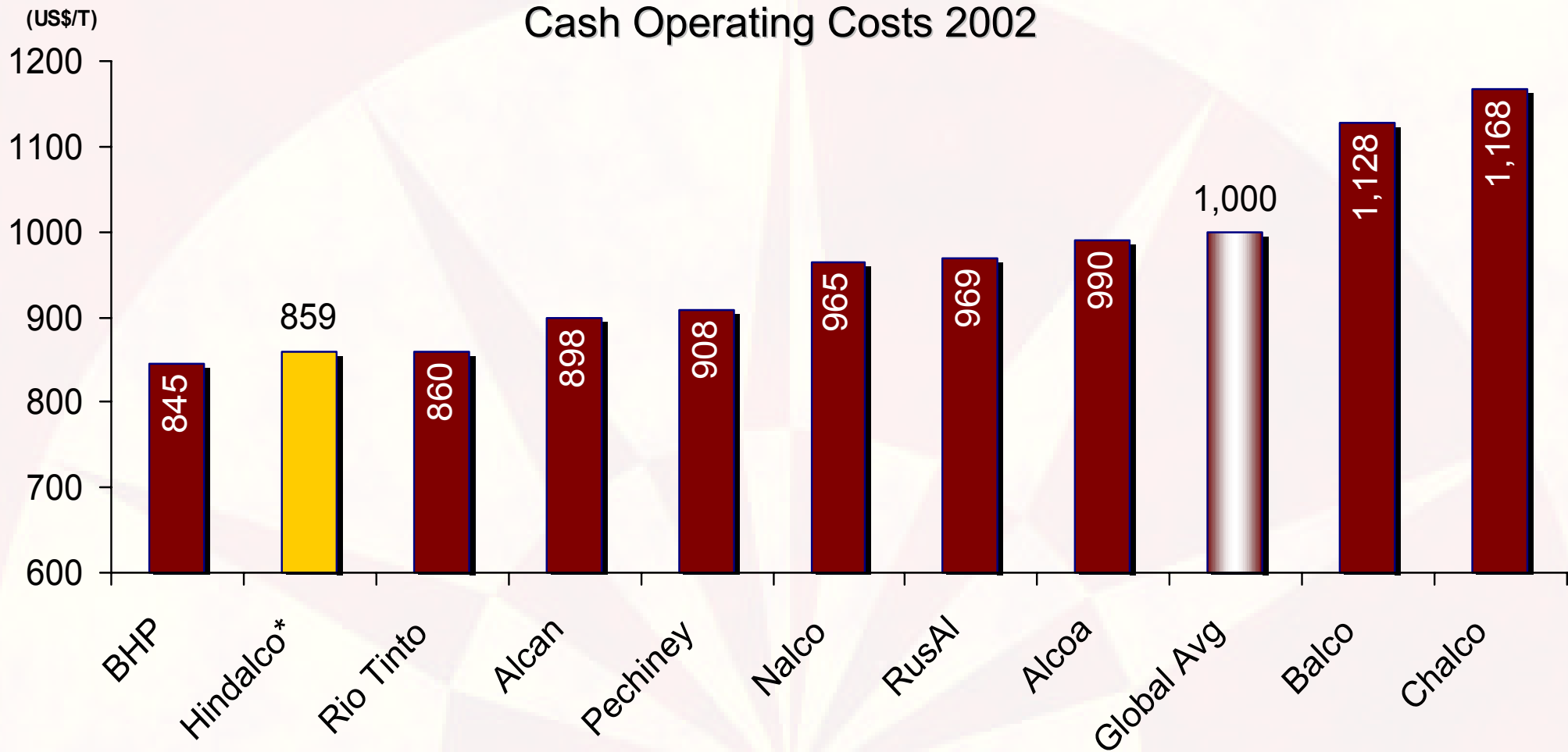
## Market Share - Value Added Products



Source: Company Data

*Improving supply of low cost metal to further strengthen leadership*

# Amongst lowest cost producers in the World

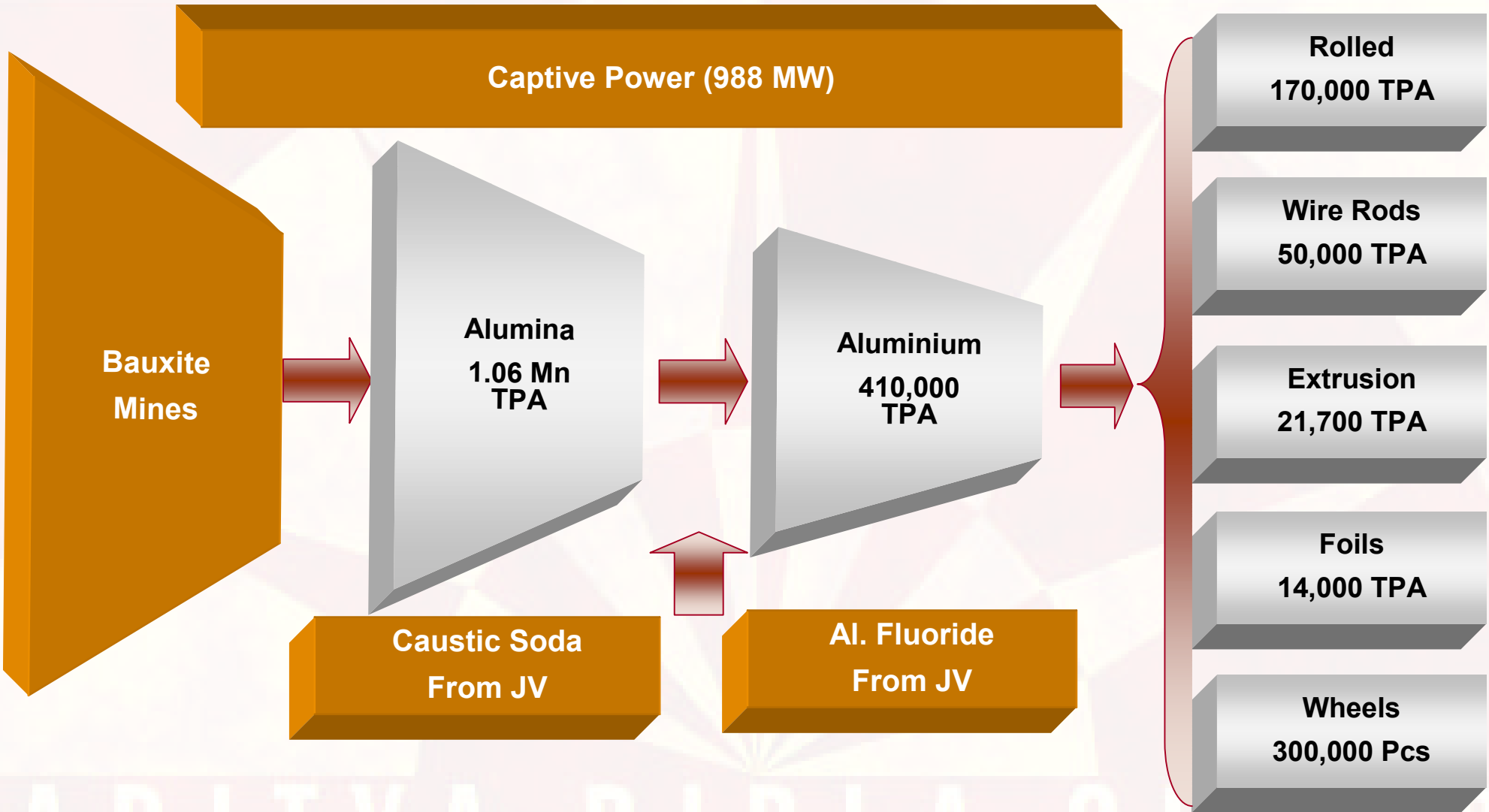


Source: CRU Report on Aluminium Smelting Costs, May 2003

\* Relates to Hindalco Renukoot

*Brownfield expansion to lower cash costs further*

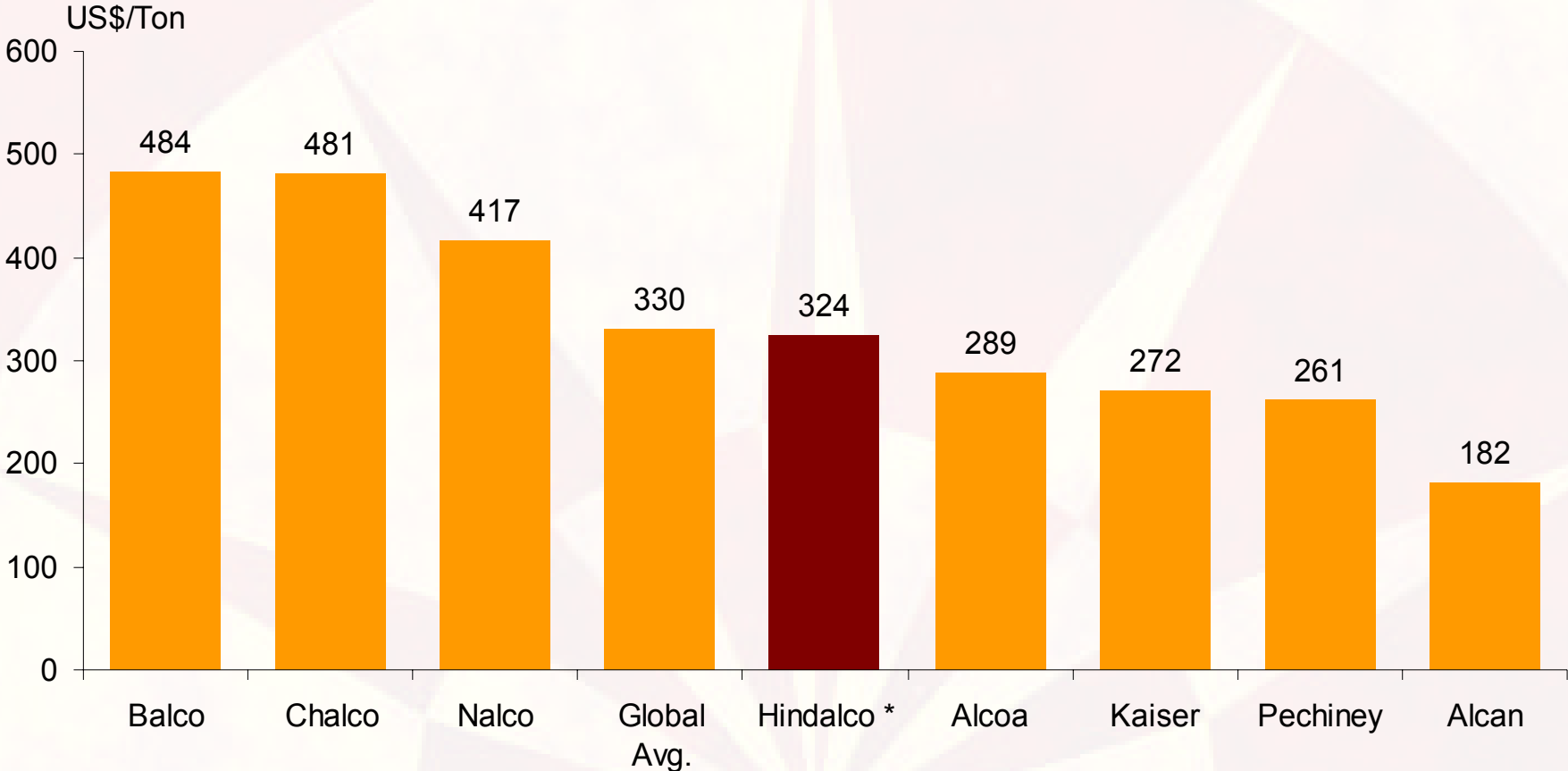
# Fully integrated operations: A significant strategic advantage



*Indal synergies provide additional strength and operational flexibility*

# Access to low cost captive power

## Pot-room Power Cost (US\$/Ton of Metal)



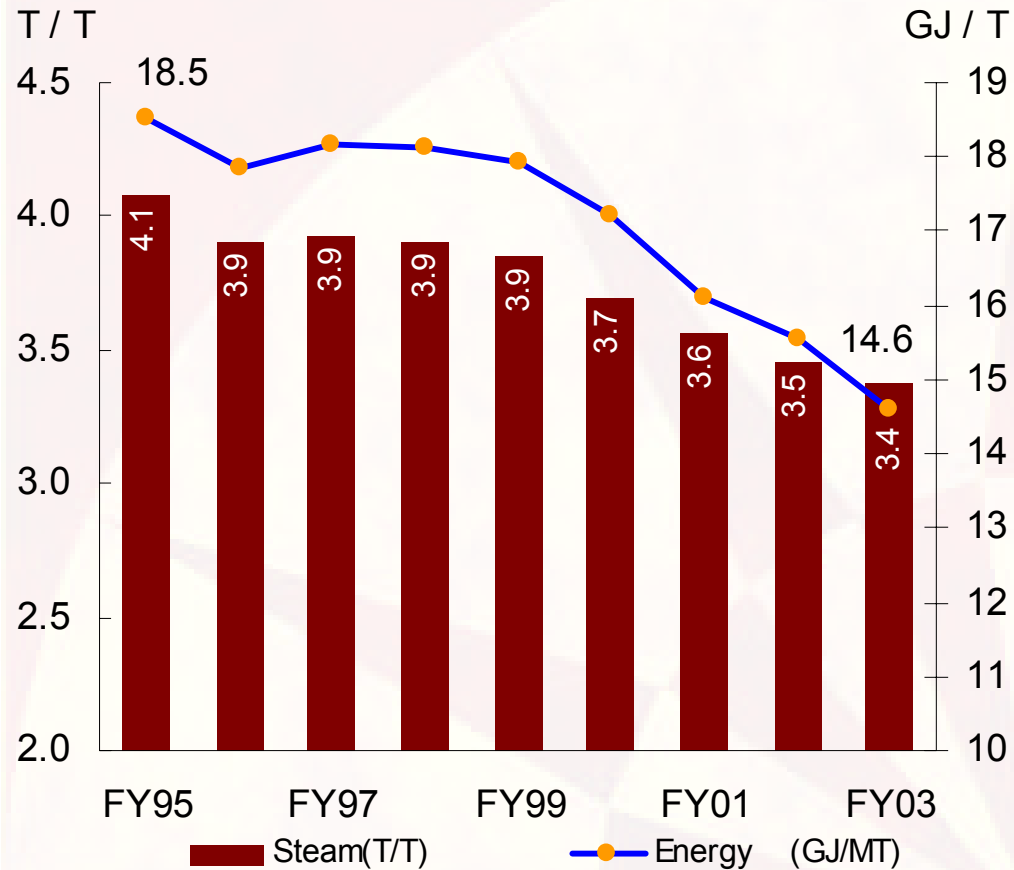
Source: CRU Report on Aluminium Smelting Costs, May 2003

\* Data relates to Hindalco Renukoot

*Lowest in the region and globally competitive*

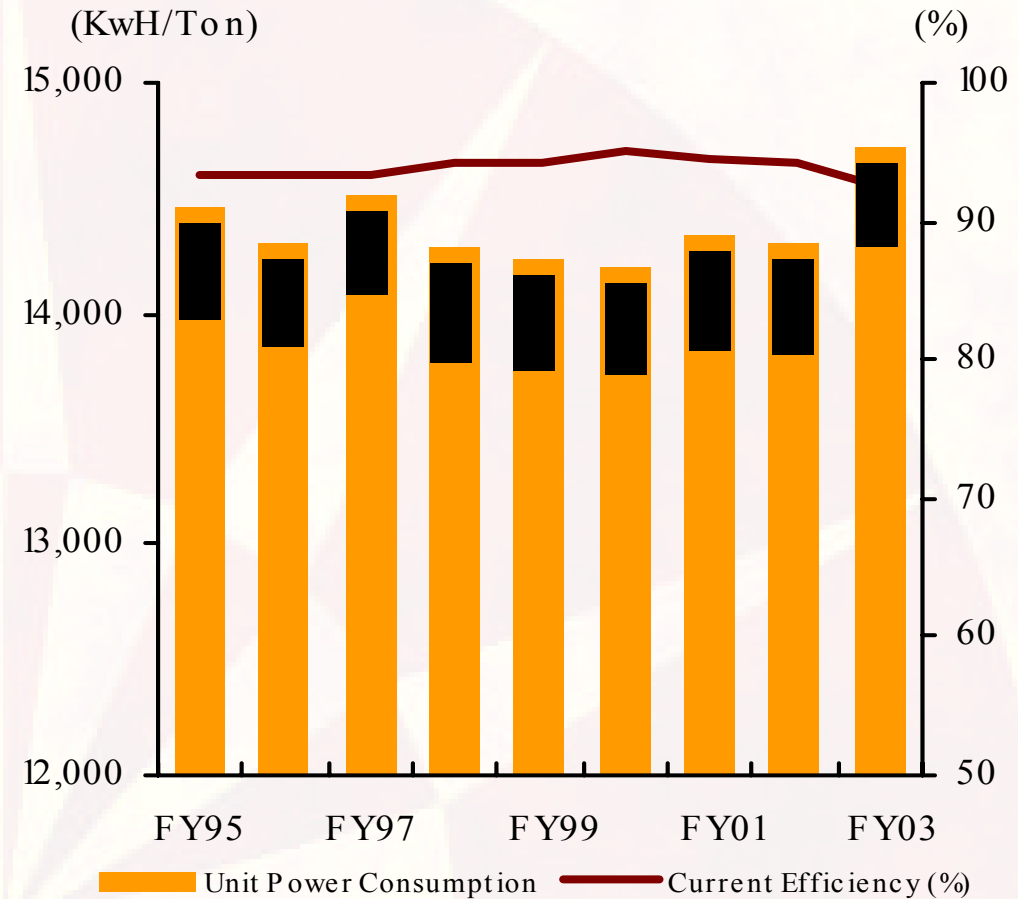
# Sustained efficiency improvement over the years

## Refinery Energy Efficiency



Source: Company Data and relates to Hindalco Renukoot

## Smelter Energy Efficiency

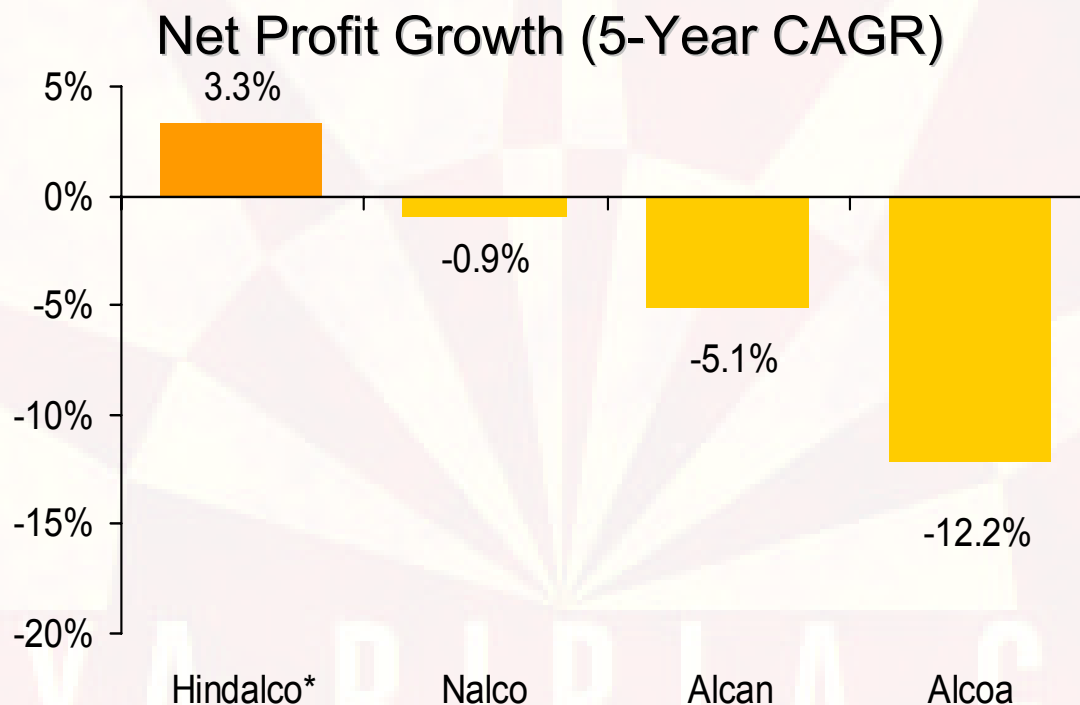


Source: Company Data and relates to Hindalco Renukoot

*Moving towards the best in the global aluminium sector*

# Net Result: Superior margins and sustained value delivery

Figures for CY2002 / FY03	Hindalco*	Nalco	Chalco	Alcoa	Alcan
Operating Margin (%)	33.8%	45.7%	24.3%	13.1%	15.3%
EBIT Margin (%)	27.8%	33.4%	12.5%	15.3%	8.4%
ROCE (%)	17.2%	16.8%	10.1%	7.6%	7.3%



\* Data relates to Hindalco's Aluminium business only excluding Indal

# Immediate growth drivers

## #1: Brownfield expansion having twin impact

- Renukoot expansion commissioned ahead of schedule
  - Smelter operating at 315,000 MTPA; to increase to 345,000 MTPA by October 2003
  - 10th Power Unit at Renusagar is commissioned
  - Co-generation plant to be commissioned by Mar-04; Will help raise Smelter capacity to 360,000 TPA by FY05
- Metal production to grow over 25% in FY04
- Expansion to lower cash costs further
  - Adoption of new technologies and upgradation of processes to help cut costs
  - Impact on entire production volumes

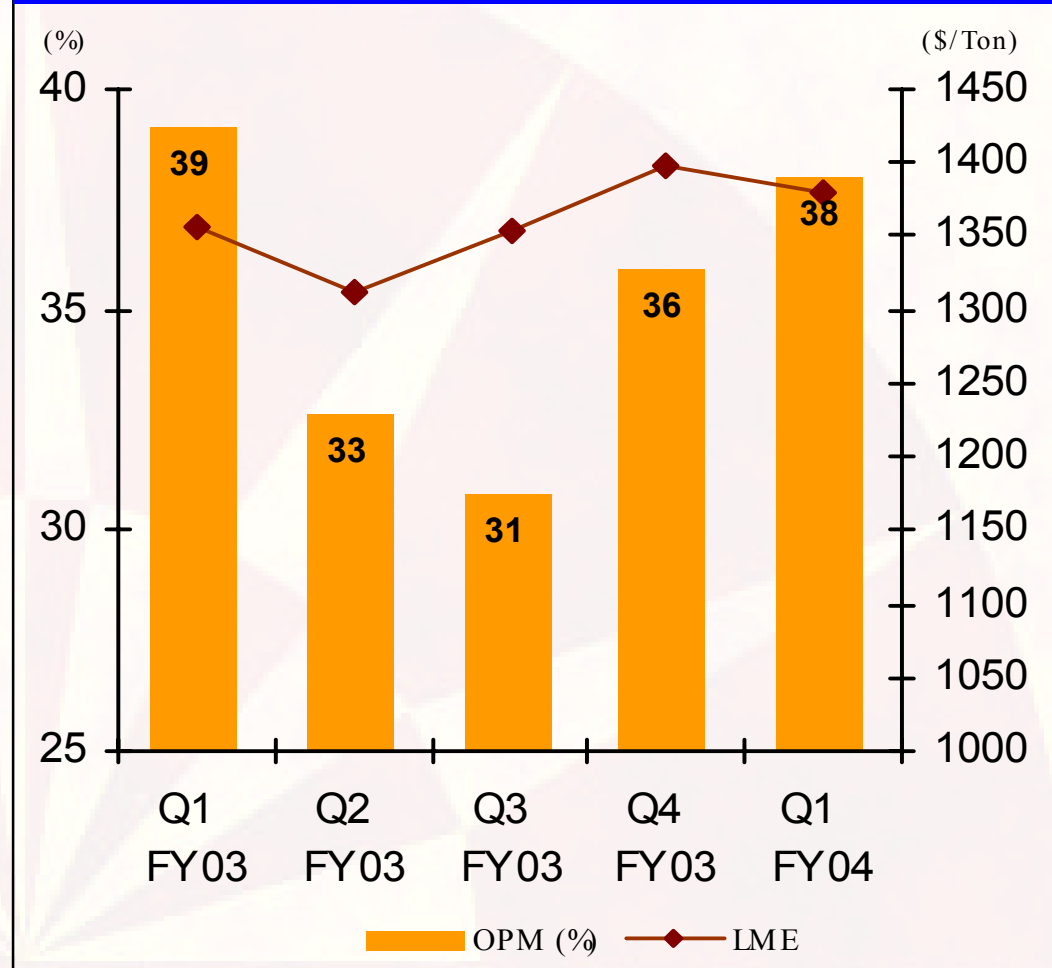
*40% lower costs for expansion provides significant competitive advantage*

# Immediate growth drivers

## #2: Margin recovery gaining momentum

- Operating margins bottomed out in Q3FY03
  - Higher input costs for power generation
  - Power disruptions affecting Smelter operations
- Smart recovery in margins to 38% in Q1
  - Full impact of recovery in FY04
  - Plant efficiencies being regained
  - On-going cost reduction efforts to add strength
- Recovery in LME will add strength

### Operating Margins vs. LME



Source: Company Data

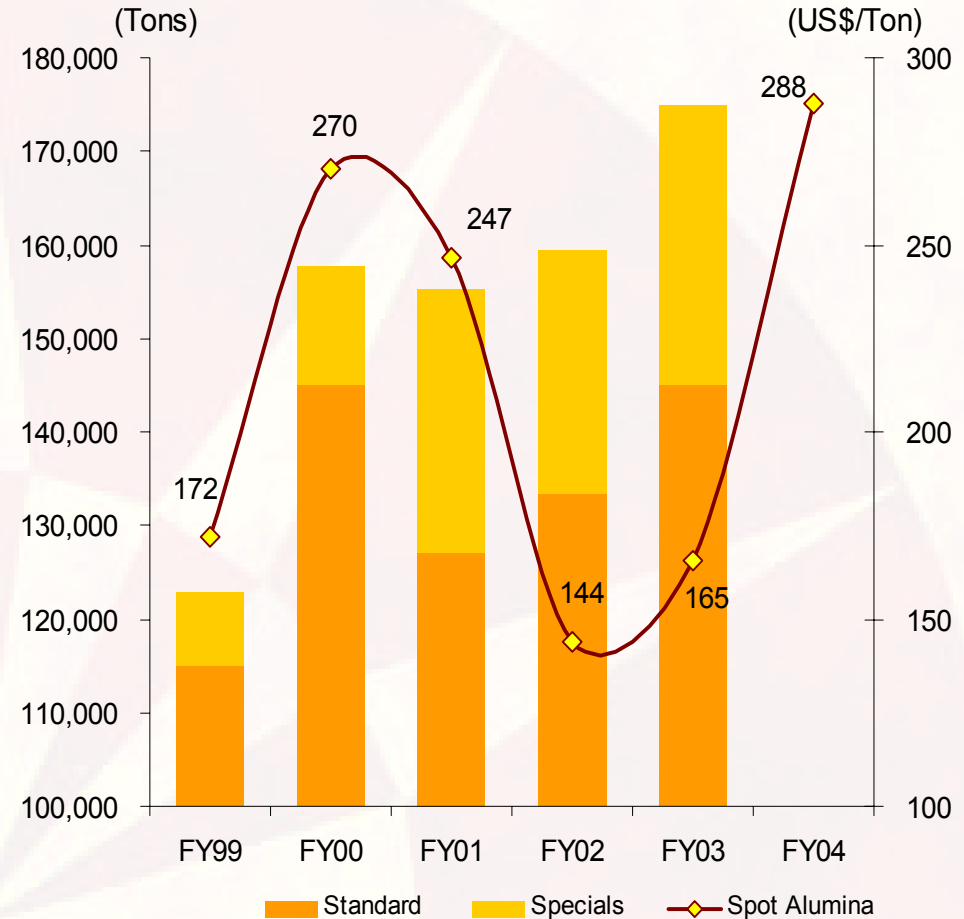
Operating margins sustainable around 38-40%

# Immediate growth drivers

## #3: Indal Synergies

- Strategy under implementation
  - Integration of logistics
  - Product and market rationalisation for better customer reach
  - Market synergies
  - Production process strengthening for higher efficiencies
  - Optimal usage of intermediate products across locations
- Capitalising on upturn in Alumina Prices
- Smelter expansion to add further strength

### Alumina Exports



Source: Company Data

*Indal synergies to boost earnings from FY04 onwards*

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## Copper Business

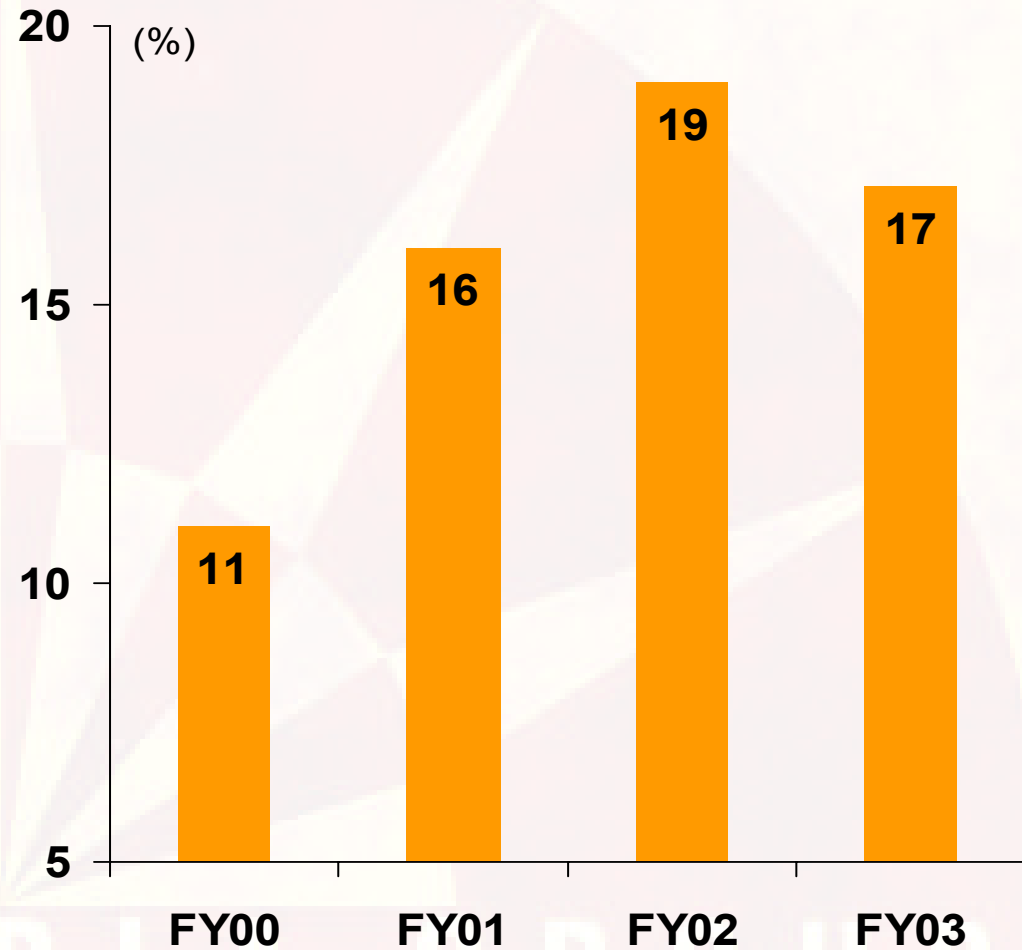
*- A high growth operation*

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# Birla Copper: Amongst fastest growing copper producers in the region

- Value accretive acquisition last year
- World class, cost efficient operations
  - Domestic market leader
  - Impressive export performance
  - Globally benchmarked efficiencies
  - Strategic locational advantages
  - Attaining global cost competitiveness through low cost brownfield expansions
- Superior, sustainable ROCE

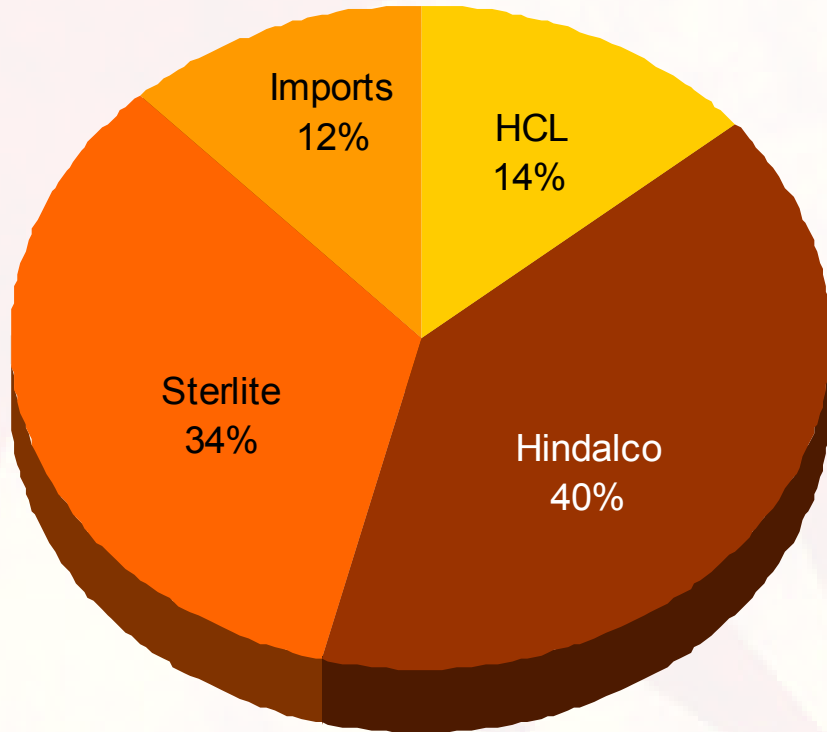
## Business ROCE



Source: Company Data

# Domestic market leader with enviable export success

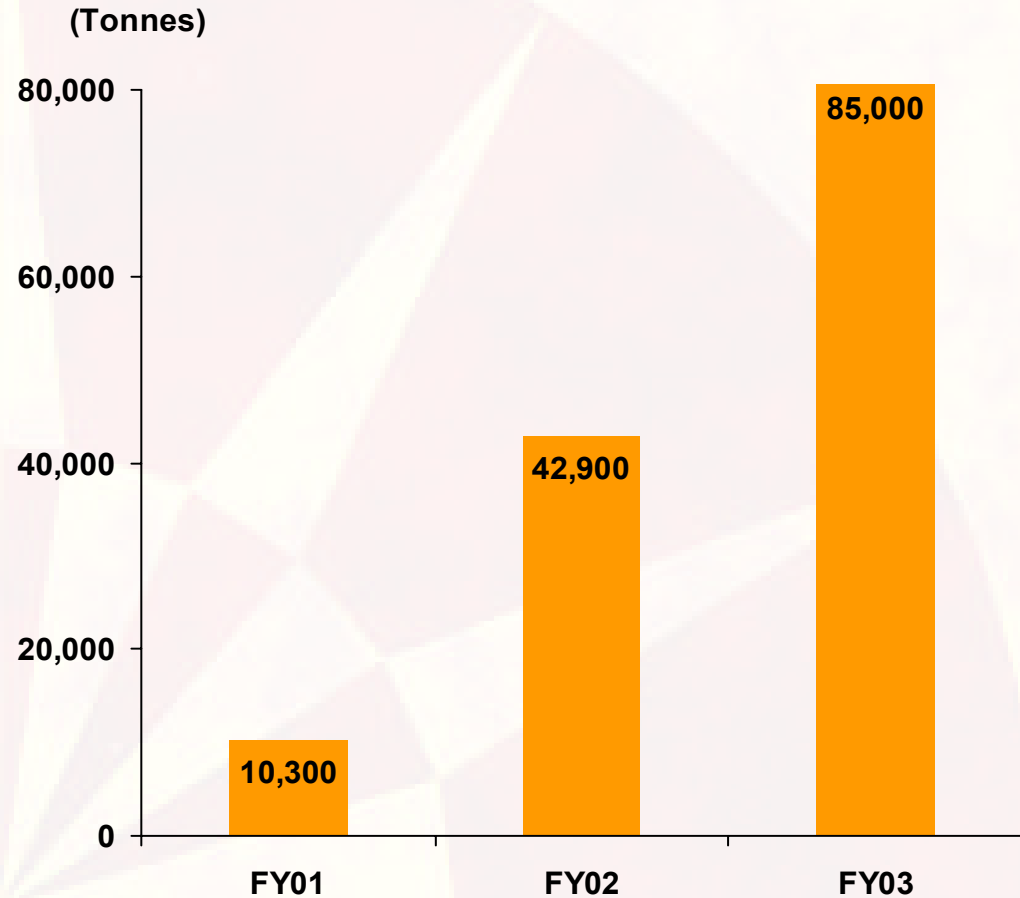
## Domestic Market Share (%)



Domestic Market Size: 250,000 Tonnes

Source: Company Data

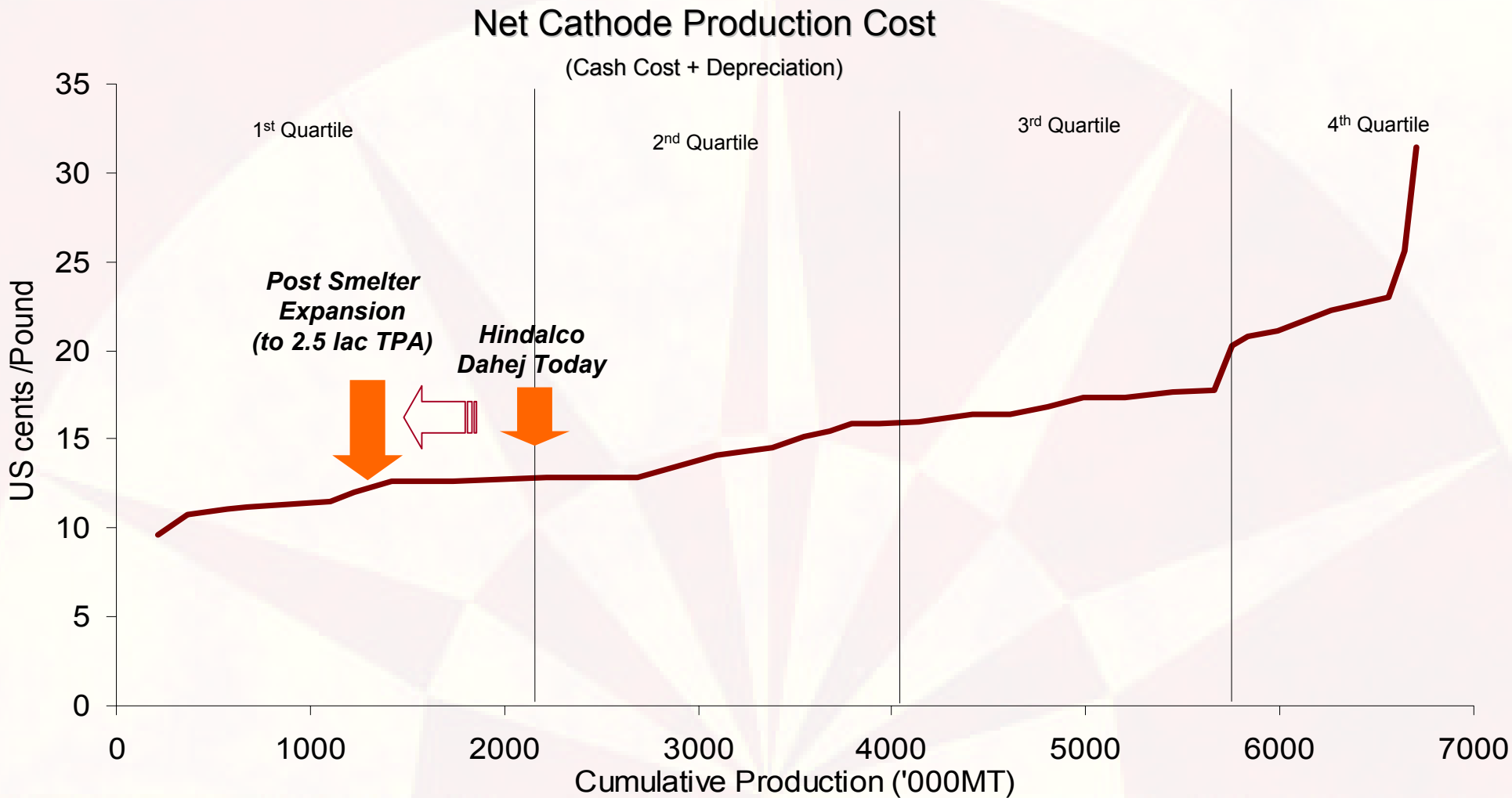
## Copper Exports (MT)



Source: Company Data

*LME Grade 'A' accreditation to help boost exports*

In the 1<sup>st</sup> quartile of global costs already

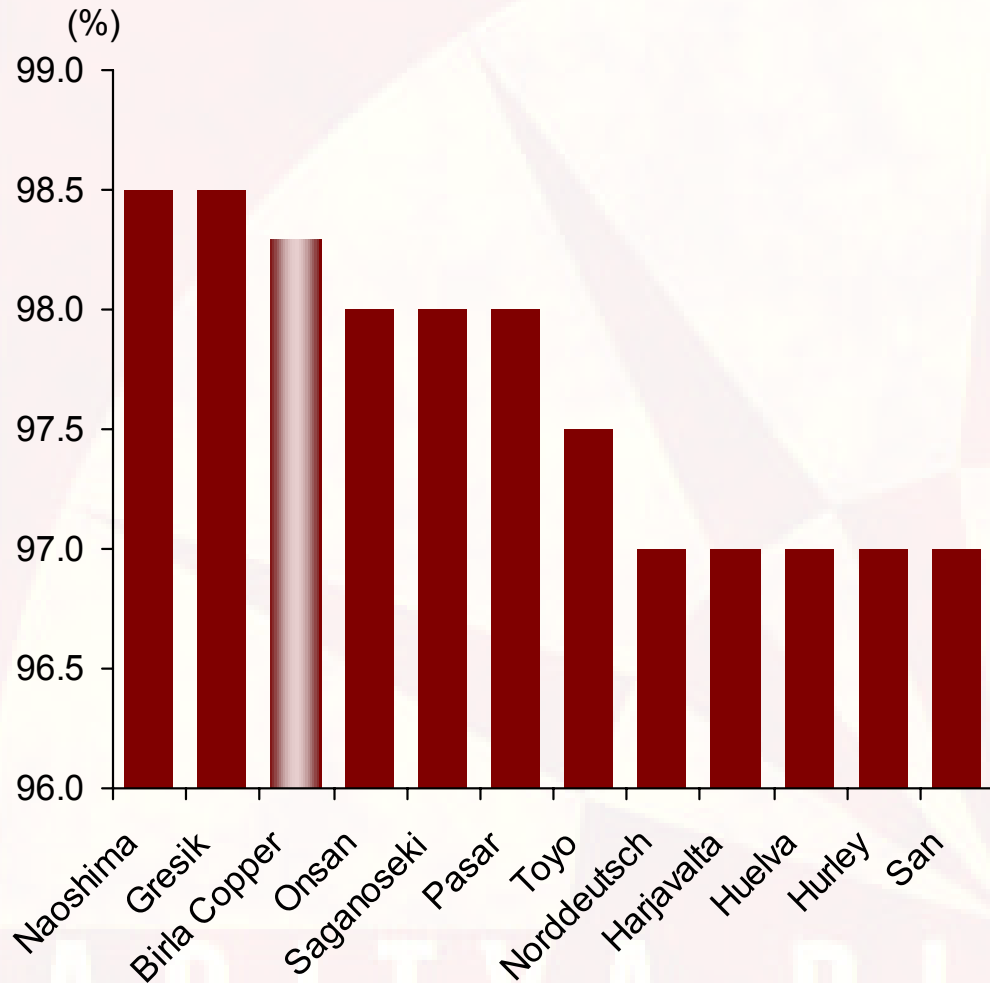


Source: CRU Data

*Moving ahead to be amongst Top-10% of global cost structure*

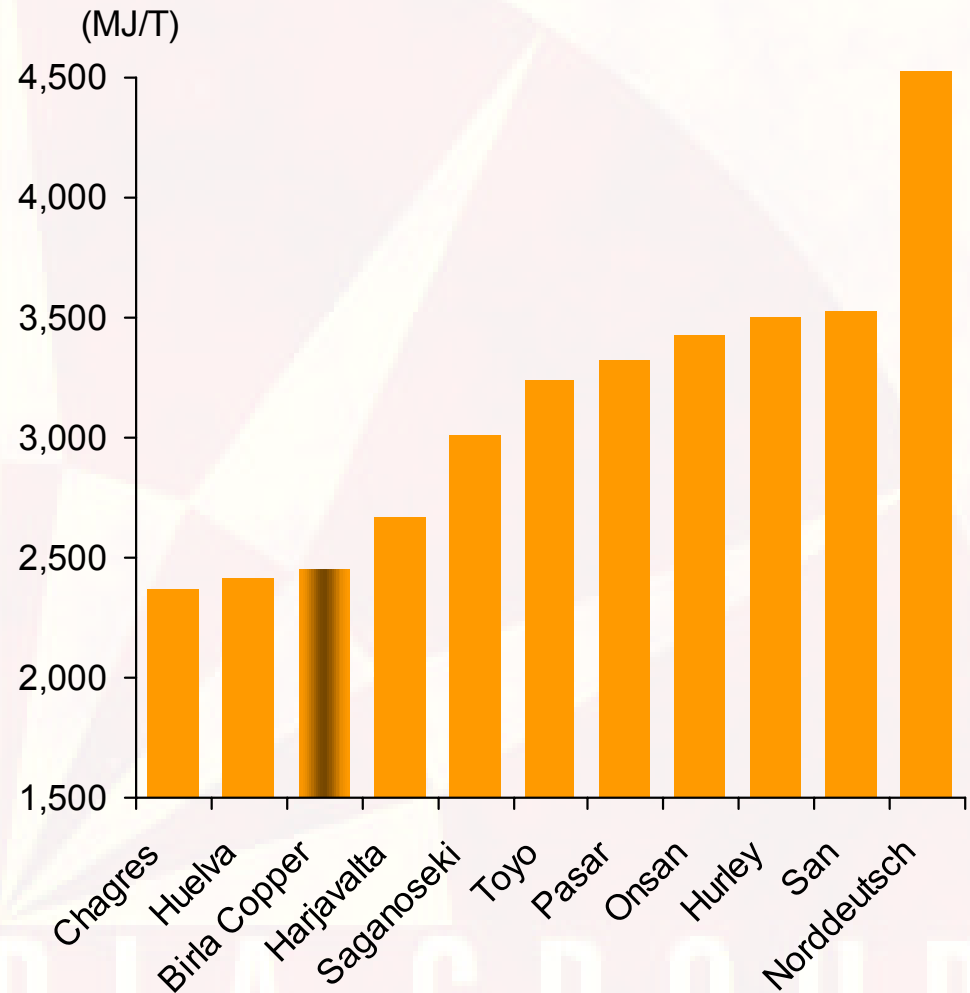
# Helped by benchmarked efficiencies

## Metal Recovery



Source: Company Data

## Energy Consumption



Source: Company Data

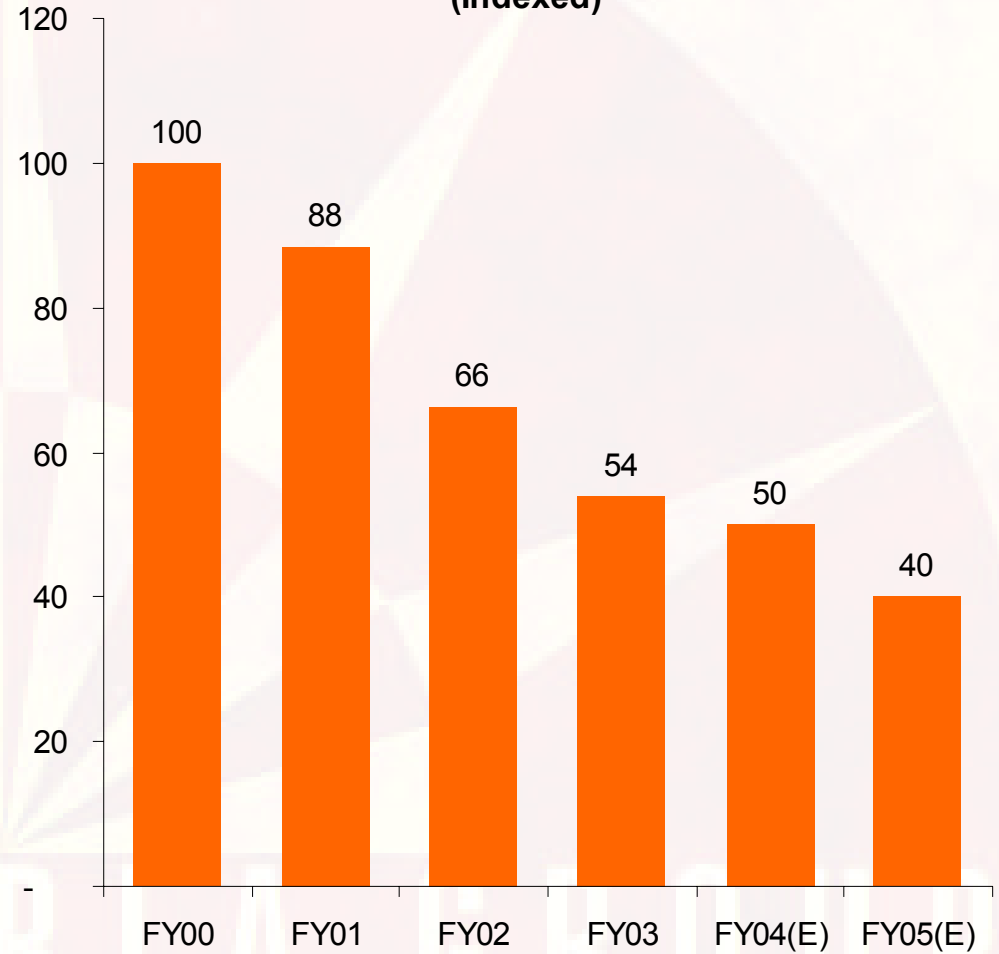
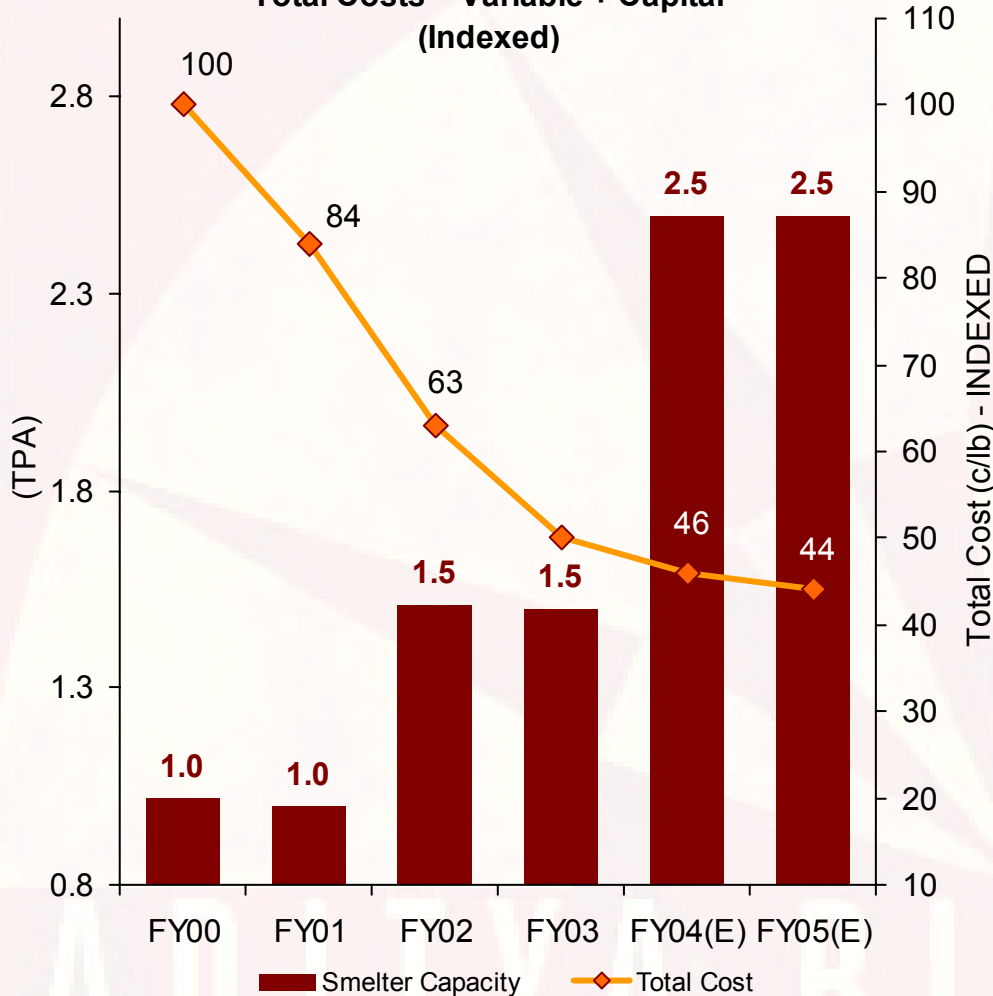
# ... And low cost brownfield expansions

## Total costs drop 50%...

## ... On falling infrastructure costs

Total Costs = Variable + Capital  
(Indexed)

Infrastructure Costs Per Ton of Cathode  
(Indexed)

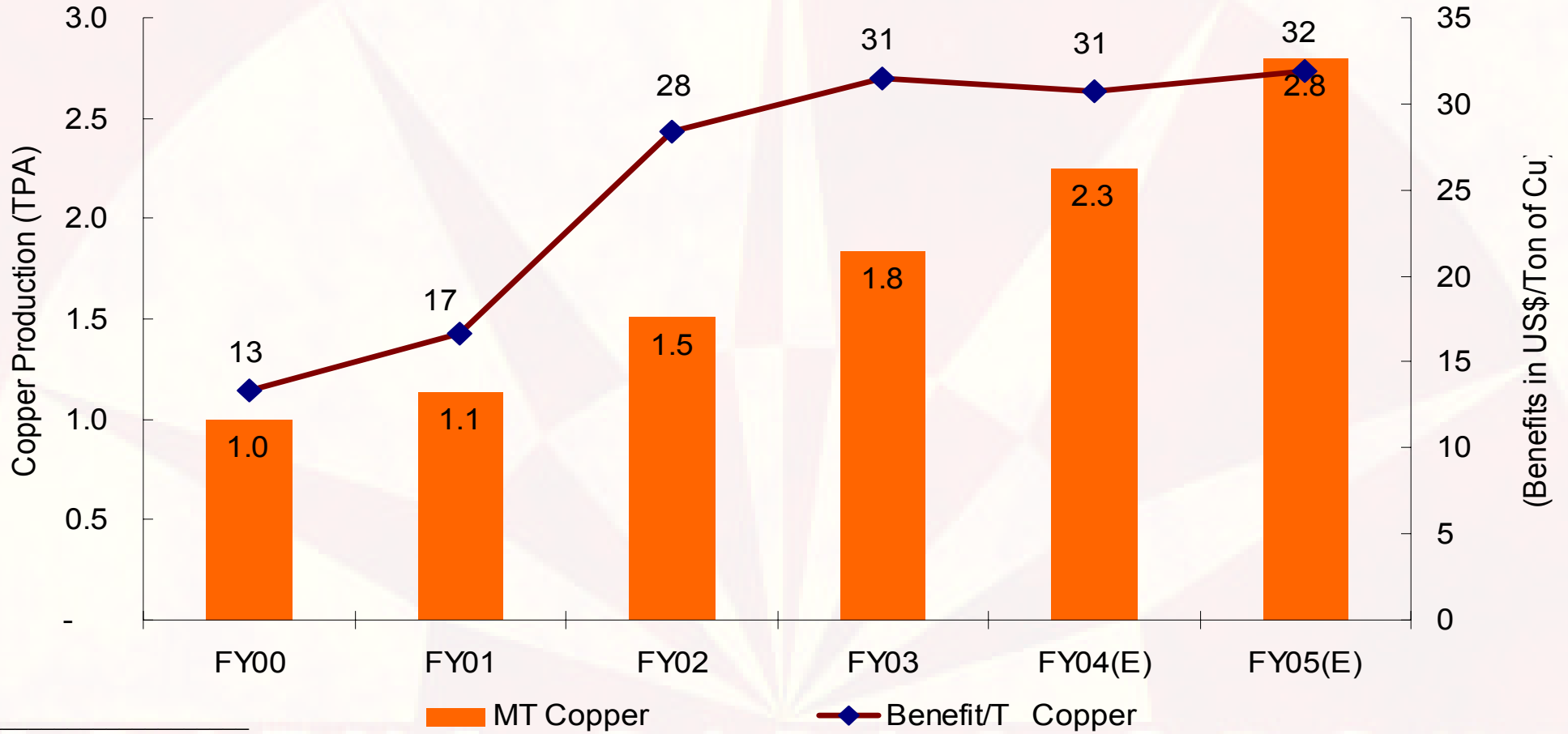


Source: Company Data

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# Value from by-products add further strength

Benefits of By-product Value Addition  
US\$/T of Copper Production



Source: Company Data

*By-product value addition contributes 5-8% to business profitability*

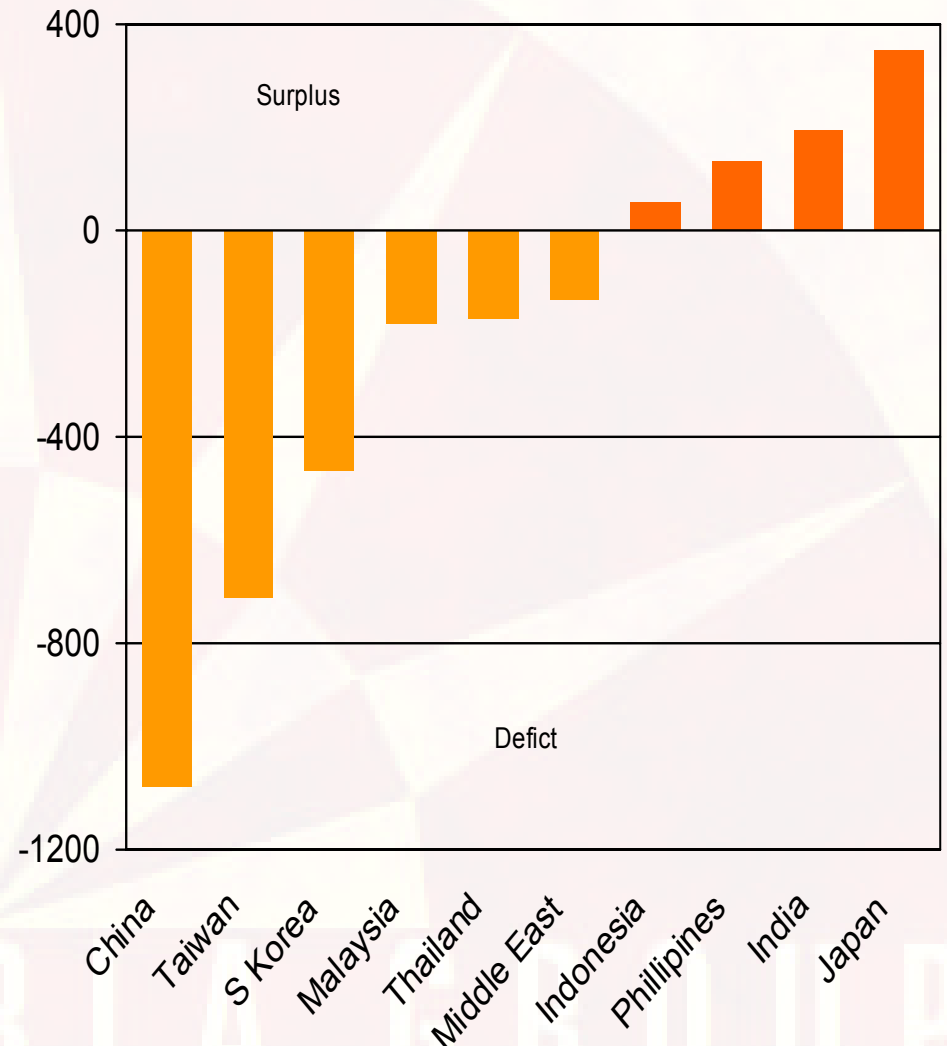
# Superior growth potential in Asia

## Demand Supply in Asia

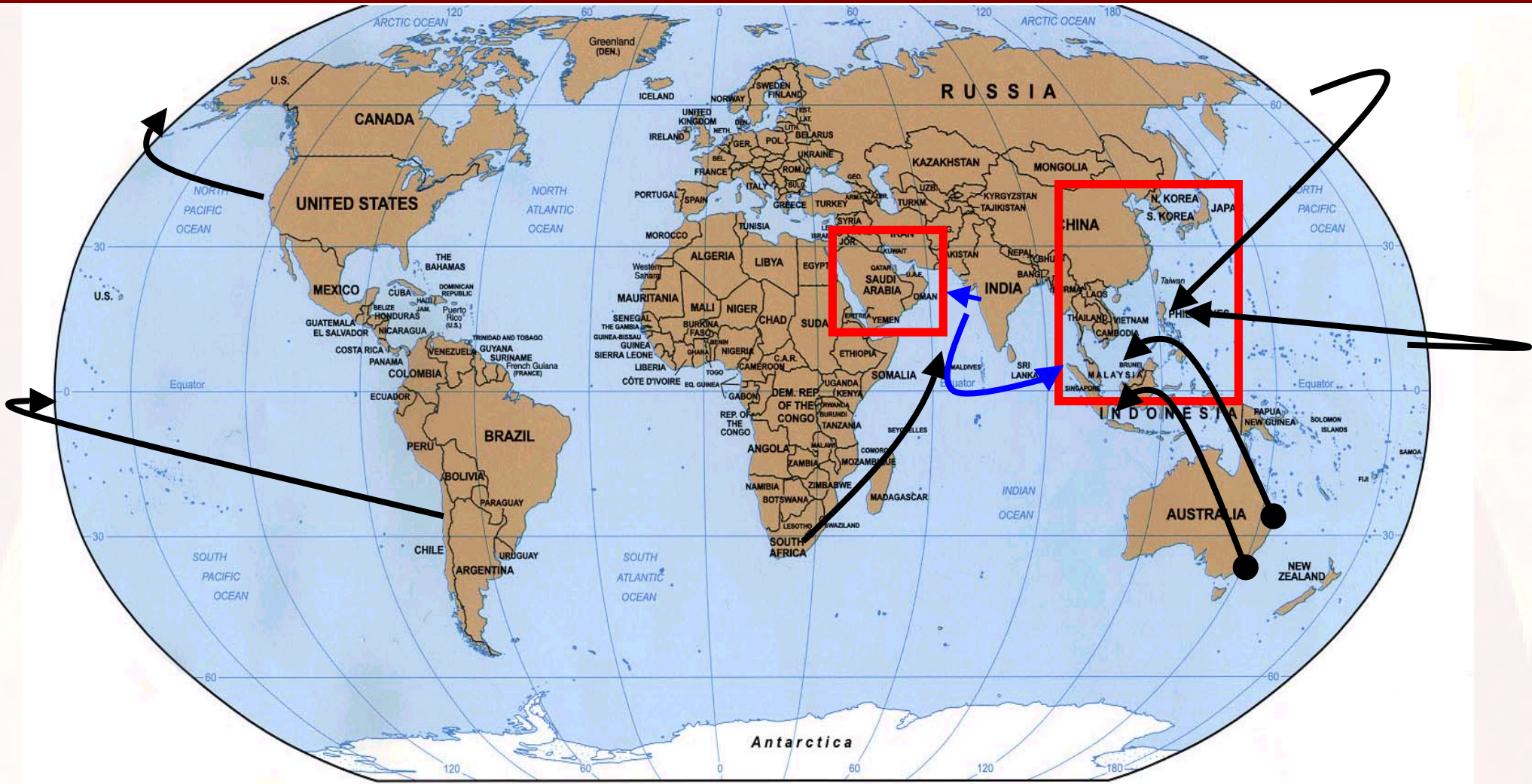
In '000 Tons	2000	2001	2002	2003 (E)
Asia	2748	2635	2917	3034
China	1800	2190	2488	2832
Sub-Total	4548	4825	5405	5866
Japan	1349	1145	1146	1157
<b>Total Demand</b>	<b>5897</b>	<b>5970</b>	<b>6551</b>	<b>7023</b>
Growth (%)	-	1.2	9.7	7.2
Production	4168	4342	4360	4785
<b>Demand-Supply Gap</b>	<b>1729</b>	<b>1628</b>	<b>2191</b>	<b>2238</b>

Source: CRU Copper Monitor, August 2003

## Country-wise D-S Gap 2004(E)



# Strategically located to reap benefits of high growth potential in Asia



*Significant freight advantage in reaching high growth markets of South East Asia and Middle East*

## Brownfield commissioning to drive immediate growth

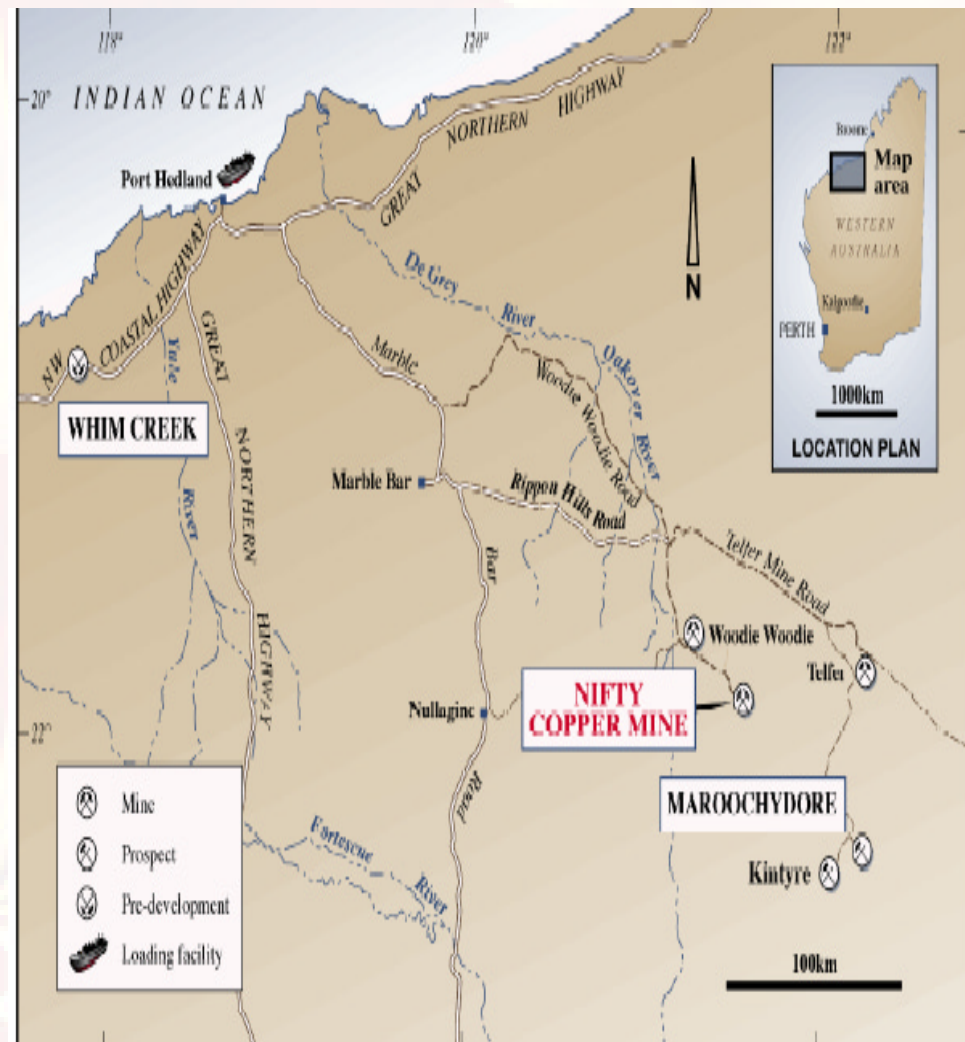
- Copper smelter capacity being raised to 250,000 TPA by 2004
- Volumes to grow 25% per annum over next 2 years
- To help move further into first quartile of global costs
  - Already amongst lowest variable costs globally
  - Low cost Brownfield expansion to help reduce cost further
  - Fixed cost disadvantage to be overcome by FY04
- Growth backed by strong export demand
  - LME Grade 'A' distinction to help tap potential
- Planning further expansion of Smelter

*Rising volumes and falling costs to help sustain ROCE even with lower tariff*

# Nifty Mines will add further strength in future

- Nifty mines acquisition value accretive
  - 25,000 TPA cathode through oxide operations
  - Concentrate supplies over a 14+ years
  - Annual supplies of 60,000 - 70,000 tonnes of copper equivalent in concentrate form
  - Exploration rights for the Paterson range
- Mines to further strengthen copper business
  - Tap copper value chain optimally
  - Secure concentrates in a tight spot market
  - Critical in the context of expanding operations
  - Freight cost advantage
    - Savings of US\$36-46/Ton of Copper
- Copper concentrates to be available from FY06 onwards

## Nifty Mines



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Well positioned to capitalise on the possible upturn in the Global non-ferrous sector

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# Aluminium: Global outlook positive

- Long-term fundamentals remain strong
- Economic recovery to lead demand revival
  - Global economic recovery proving elusive
  - Signs of revival in the US, but timing uncertain
  - Europe is weak with negatives from Germany
  - Japan improving but sustainability is a concern
- Driven by China, Asia will continue to shine
- Supply side concerns exaggerated
  - BPA capacity restart appear unlikely
  - Supply growth from China may ease
    - Inadequate power & spike in alumina price
    - Environmental concerns
- A moderate, but sustained global recovery can move aluminium into deficit

Demand Growth (%)			
Region	7M CY03	CY 2002	CY 2001
North America	5.8	8.2	(11.8)
Asia	8.9	7.5	(3.2)
Japan	7.6	(4.0)	(6.2)
China	25.6	17.1	9.0
Western Europe	1.5	5.2	(2.3)
<b>World</b>	<b>8.3</b>	<b>7.3</b>	<b>(3.8)</b>
Production Growth (%)			
World	7.4	12.7	(5.2)

# Aluminium: Domestic outlook strengthening

- Improving consumption forecast on the back of strong GDP growth and a good monsoon
- Encouraging outlook for end-use sectors
  - Electrical: Passage of the Electricity Bill
  - Transport: Strong volume performance, to get further boost from likely strong farm sector performance
  - Construction: Improved availability of cheaper funds, stable real estate prices and fiscal incentives
  - Packaging: Strong performance to continue
  - Consumer Durables: Revival likely with a recovery in the performance of agricultural sector
  - Strategic Applications: Stable performance likely. Medium term outlook is uncertain
- Competitive pressures to remain intense
  - Increasing metal supplies and threat of cheaper imports
  - Overcapacity in downstream segments
  - Scrap imports and cheaper substitutes

*Domestic demand to grow 6-8% over next 2 years*

# Aluminium: Price outlook

- Global prices to track economic revival
  - Recent spurt driven by technicals and fund play
  - Metal Prices to be in US\$1400-1450/MT range in the near term
  - Alumina prices to stabilise at lower levels
- Domestic prices to remain under pressure
  - Rising supplies, appreciating Rupee and LME movements will exert pressure on realisations
  - Phase out of export subsidies under WTO adds to exports being increasingly unattractive

## LME Aluminium Prices

(January 2002 – September 2003)



Source: Bloomberg

# Copper: Industry outlook stable

- Copper fundamentals improving
  - Global demand likely to grow 3% in 2003
  - Inventories to fall further on supply constraints
  - Smelter closures and deferred commissioning of new Western capacities augurs well
- Asia remains an attractive market
  - Demand growth to exceed 7.2%
  - D-S gap forecast to be around 2.2 mn tonnes
- Domestic scenario not encouraging
  - Negative growth in JFTC segment
  - Surge in imports from Sri Lanka last year
  - Good monsoon & power reforms raises hope

*Successful penetration into high growth markets of Asia will help Birla Copper perform even better in the future*

# Copper: Price outlook

- Global prices improving
  - Restrained supplies and demand hopes
  - Quarterly averages up \$54/MT to \$1641 in Q1
  - Risen further since then
    - Prices averaged at \$1780 in August
    - Average of \$1800 for September so far
  - Likely to stabilise around \$1800+ by next year
- Domestic prices move in line with LME

## LME Copper Prices

(January 2002 – September 2003)

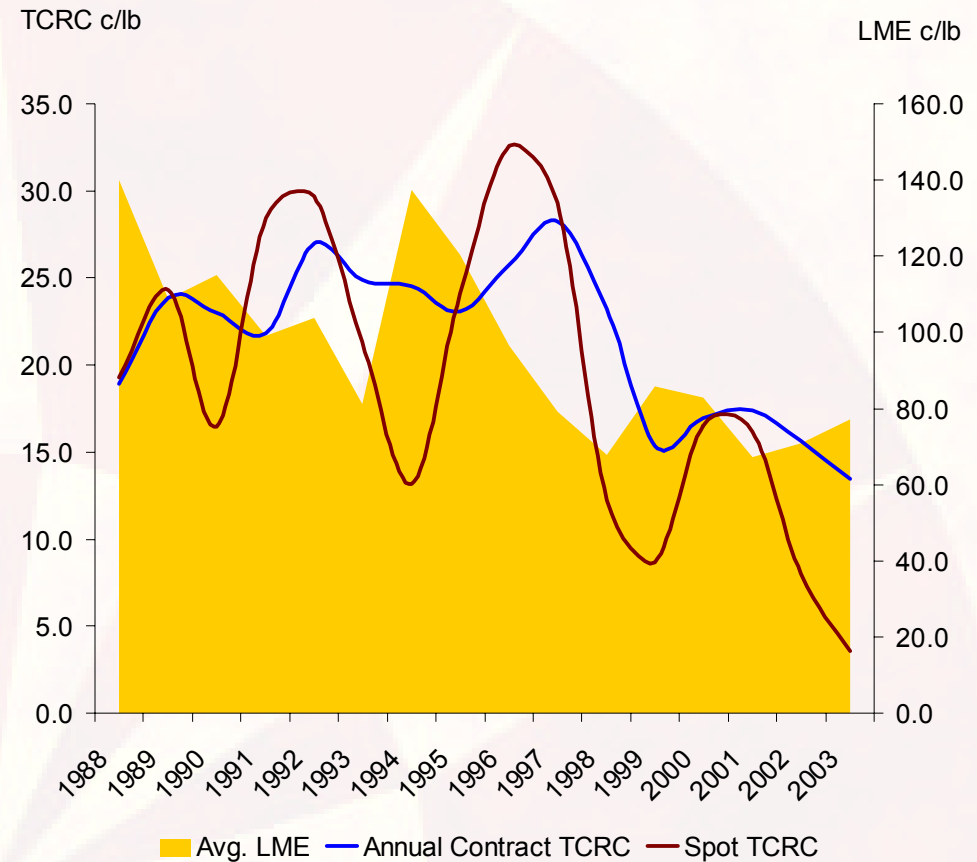


Source: Bloomberg

# TC/RC at historical low; Offers significant upside

- Concentrate markets remain tight
- Spot TCRC down 30% to 3.85 c/lb
- Mid year negotiations end lower
- Better long term and spot rates likely in 04/05
  - Sustained rise in copper prices in recent months
  - Planned re-opening of closed mines

## TCRC vs. LME Copper



Source: CRU and Bloomberg

*Demand hopes and rising concentrate supplies should lead to sustained recovery*

## Recap: Investment highlights

- Domestic market leadership with strong export presence
- Globally competitive cost structure with significant strategic advantages
- Several immediate term growth drivers
  - Brownfield expansion in Aluminium
  - Margin recovery in Aluminium
  - Indal synergy realisation, fully and faster now
  - Brownfield expansion in copper
  - Nifty mines

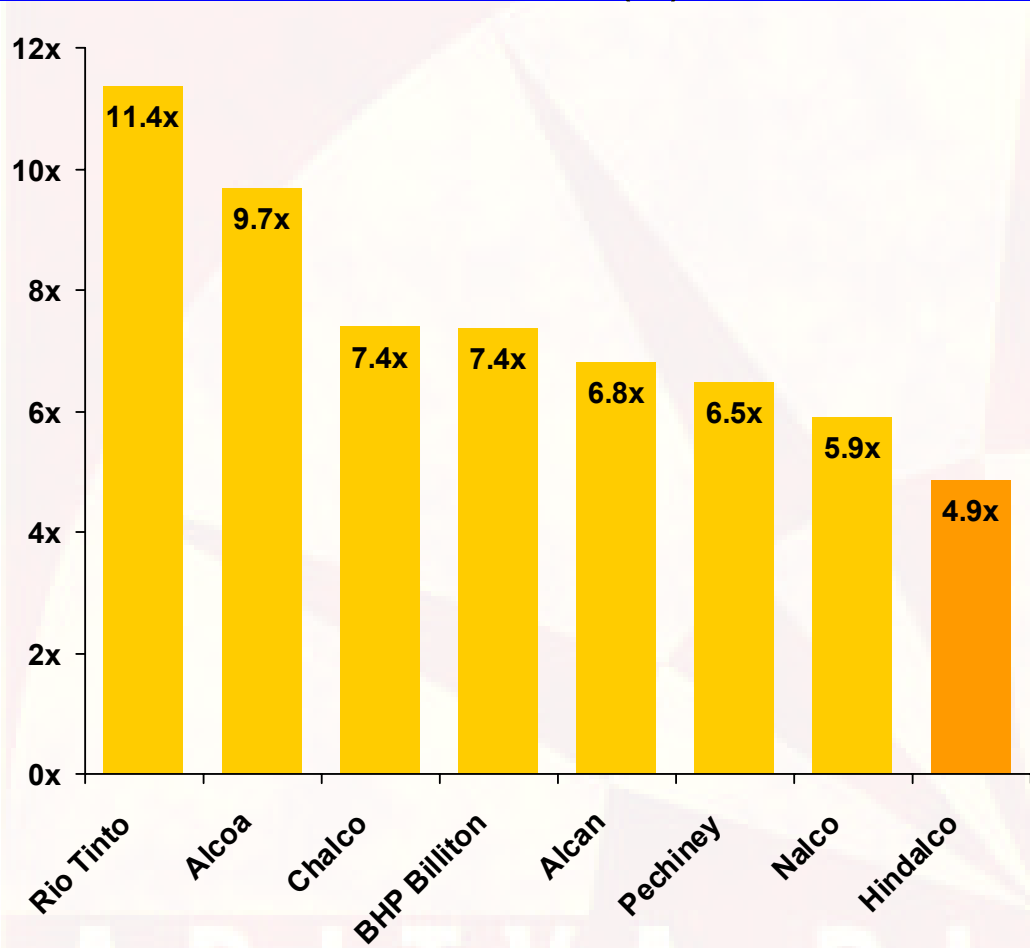
*Hindalco will be amongst fastest growing metal companies over the next 2 years*

# Growth momentum sustainable even in future

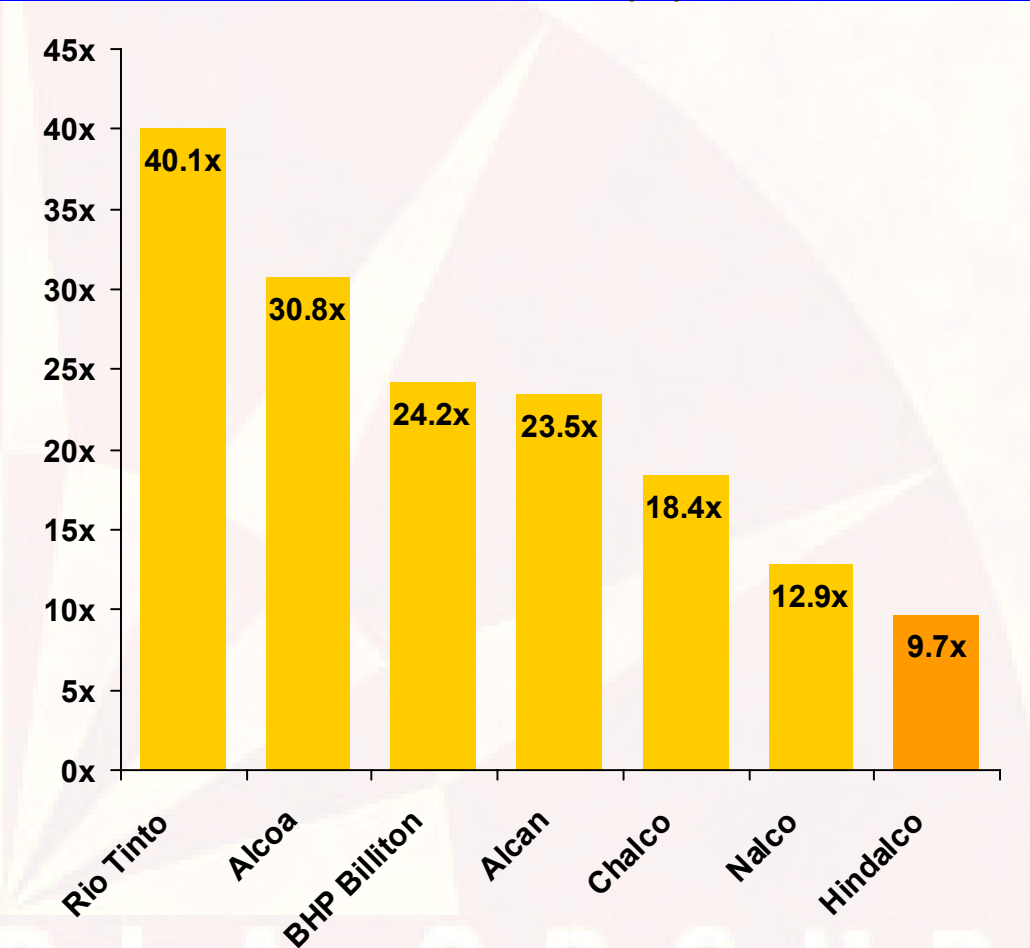
- Medium term growth drivers
  - Planned further expansion in copper
  - Mine acquisitions
- Wider growth canvas and financial strength to be leveraged for long term growth
  - Aluminium
    - Greenfield Alumina / Smelter
    - Low Cost Brownfield Expansion
    - Opportunities in Downstream Aluminium
    - Domestic inorganic opportunities including Government disinvestments
  - Copper
    - Mine Acquisitions
    - Domestic inorganic opportunities including Government disinvestments

# Valuations remain cheap...

**EV/EBIDTA (x)  
CY03/FY04 (E)\***



**PER (x)  
CY03/FY04 (E)\***



Source: Bloomberg; Stock prices as on 18<sup>th</sup> September 2003

\* Based on IBES Estimates from Bloomberg

Source: Bloomberg; Stock prices as on 18<sup>th</sup> September 2003

\* Based on IBES Estimates from Bloomberg

## ...Yet to reflect the changing growth profile

	Mkt Cap.	EPS Gr.(%)	ROCE	ROE	PEG	EV/EBIDTA	PER	PCF	P/BV
	(US\$ Bn)	5 Yr CAGR	(%)	(%)	CY2003/ FY2004 (x)				
Alcoa	23.9	(-) 5.1	4.2	4.1	2.4	9.7	30.8	10.0	2.3
Alcan	12.6	(-) 12.2	3.8	4.3	1.4	6.8	23.5	9.7	1.4
Pechiney	4.4	n.a	5.8	-	-	6.5	26.2	7.5	1.3
Chalco	3.0	8.3*	7.2	9.5	1.0	7.4	18.4	9.2	1.7
Nalco	1.4	(-) 0.9	10.8	12.0	0.9	5.9	12.9	10.6	2.7
BHP Billiton	27.2	16.8*	9.5	13.4	2.2	7.4	24.2	11.7	3.2
Rio Tinto	11.6	(-) 6.1	4.9	8.9	6.1	11.4	40.1	9.6	4.1
<b>Hindalco</b>	<b>1.7</b>	<b>6.1</b>	<b>15.3</b>	<b>13.4</b>	<b>0.7</b>	<b>4.9</b>	<b>9.7</b>	<b>8.4</b>	<b>1.4</b>

Source: Bloomberg Data as on 18<sup>th</sup> September 2003

\* CAGR for 3 years

*We believe, substantial discount to Global peers notwithstanding superior returns and changing growth should drive re-rating*

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***Thank You***

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