

HINDALCO



# Hindalco Industries Limited

Performance Review

H1 2007-08

Presentation to Investors

31st October 2007

ADITYA BIRLA GROUP

**Backdrop & Highlights**

**Business Performance & Outlook**

**Project Highlights**

**Detailed Q2 FY08 Financials**

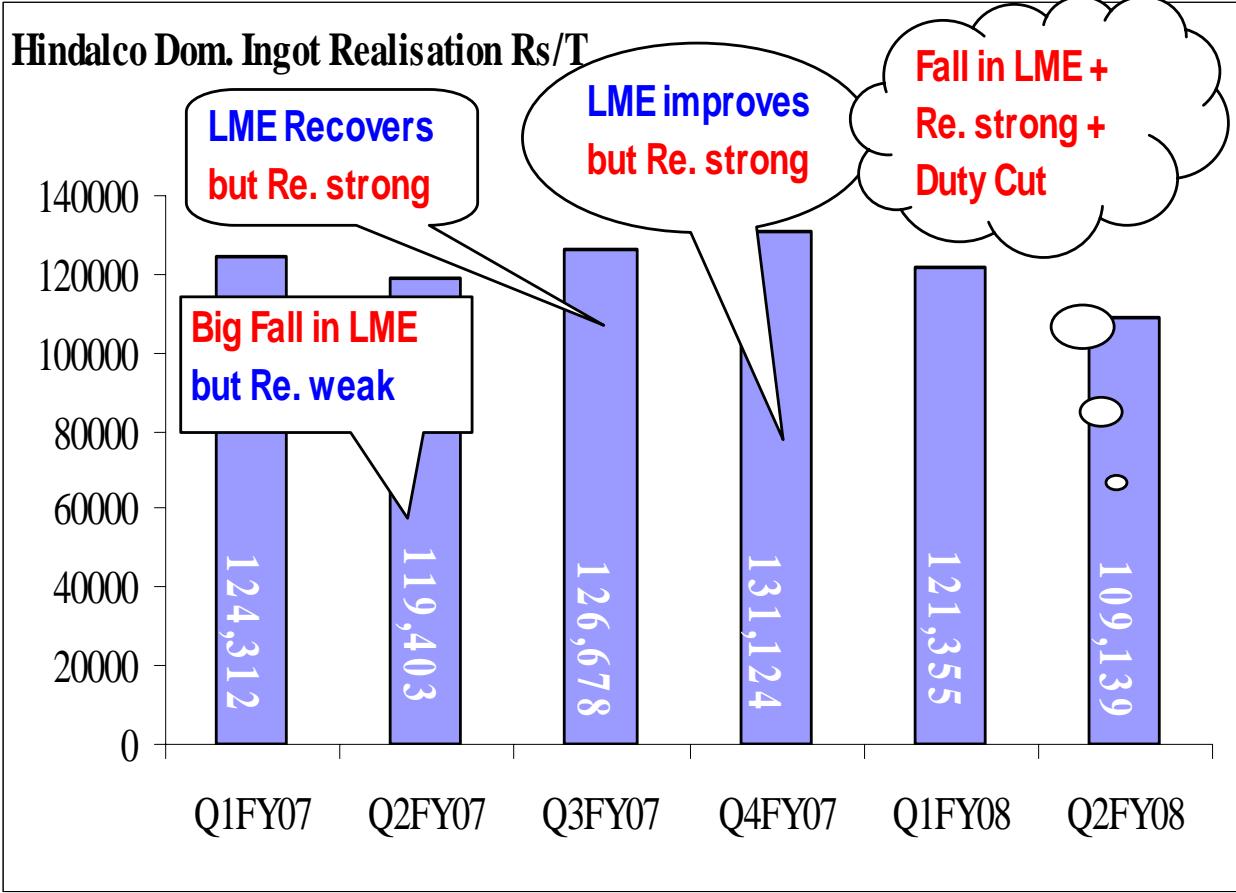
# Backdrop : H1 FY08

## Adverse Macro economic factors,

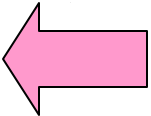
- Domestic Aluminium realisation down by 8% YoY from Rs.118625/T to Rs 109203/T .
  - *INR appreciating by 11% (US\$ from Rs.45.93/\$ during H1 FY07 to Rs.41.01 /\$ during H1 FY08).*
  - *Aluminium Customs duty down from 8.08% to 5.72%*
- Alumina spot price down by 22% from US\$416/Mt during H1 FY07 to US\$341/Mt during H1 FY08
- Copper duty differential down from 5.1% to 3.1%.
- Copper TC/RC fell by 15% during the period and it is expected to reduce further.



# Trend of Domestic Ingot Realisations

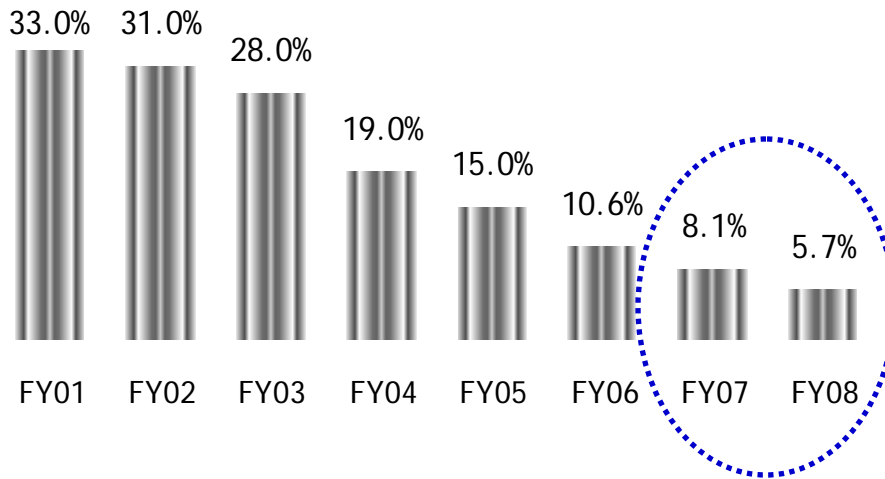


FY 08 PRICE CHANGE	
Date	Change Rs/T
03-Apr-07	3,000
03-May-07	-7,000
20-May-07	3,000
01-Jun-07	-3,500
16-Jun-07	-4,000
18-Jul-07	3,000
10-Aug-07	-4,000
18-Aug-07	-4,000
12-Sep-07	-5,000
26-Sep-07	-3,000
<b>Net Change</b>	<b>-21,500</b>

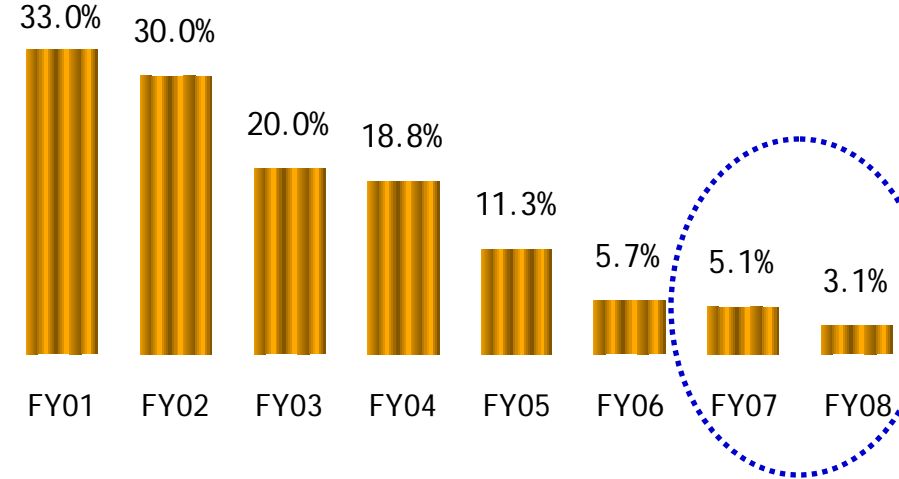


# Domestic Macro Trends- FY08

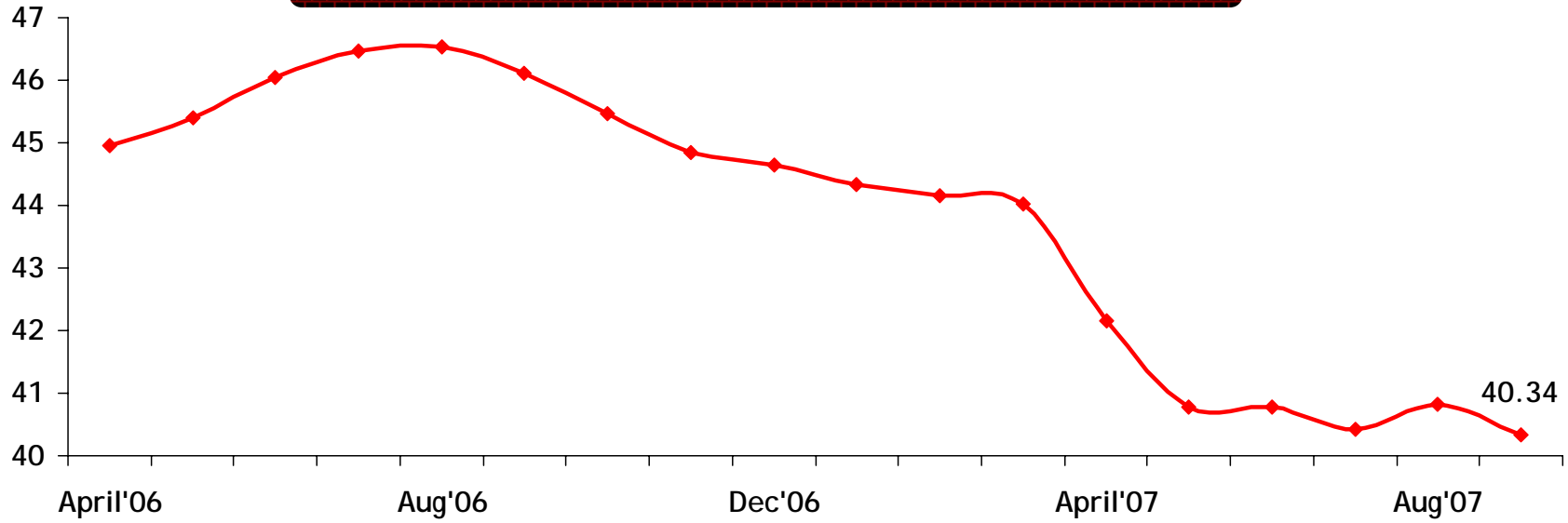
### Aluminium import duty



### Copper Duty Differential



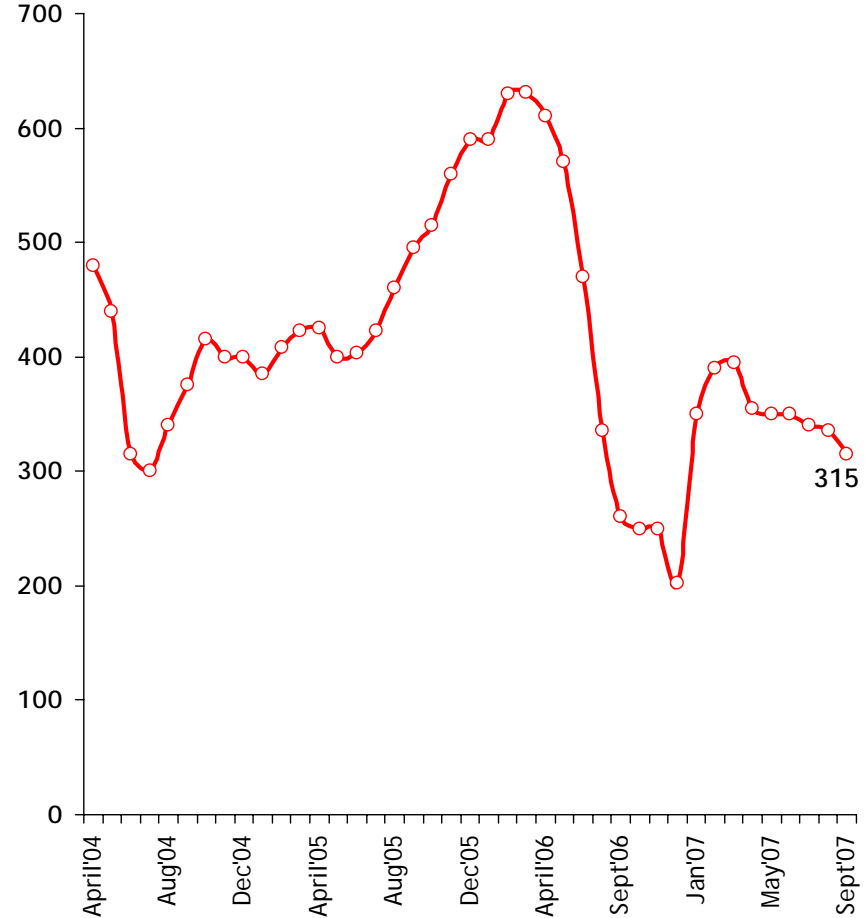
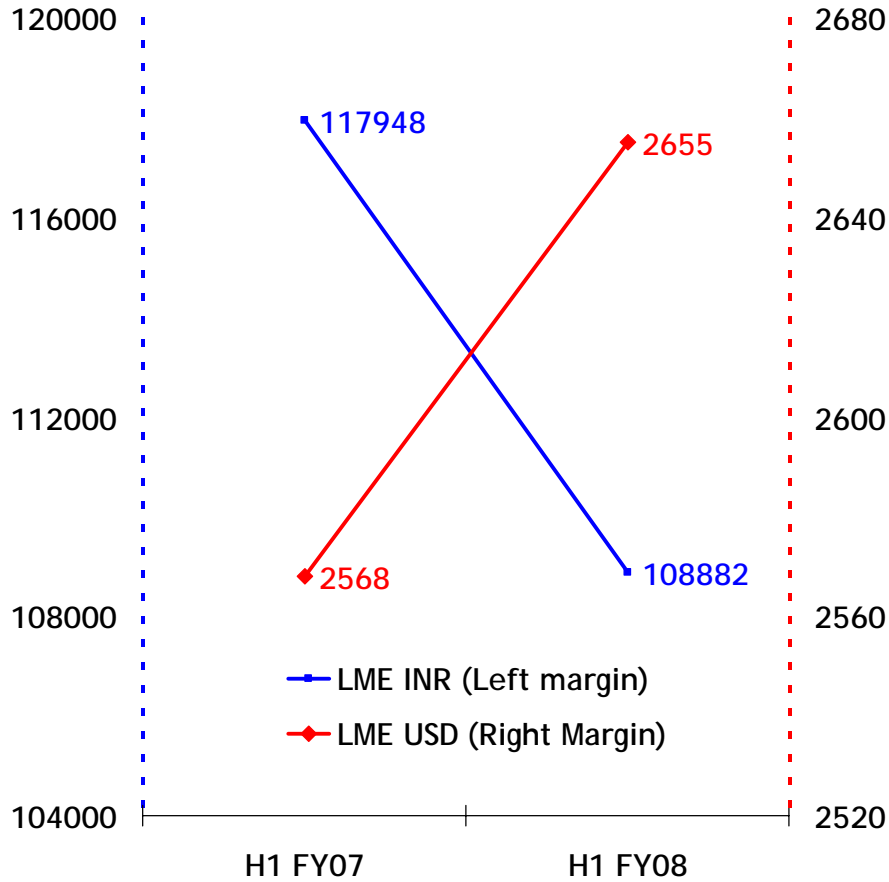
### Indian Rupee continuously appreciating



# Global Macro Trends -FY08

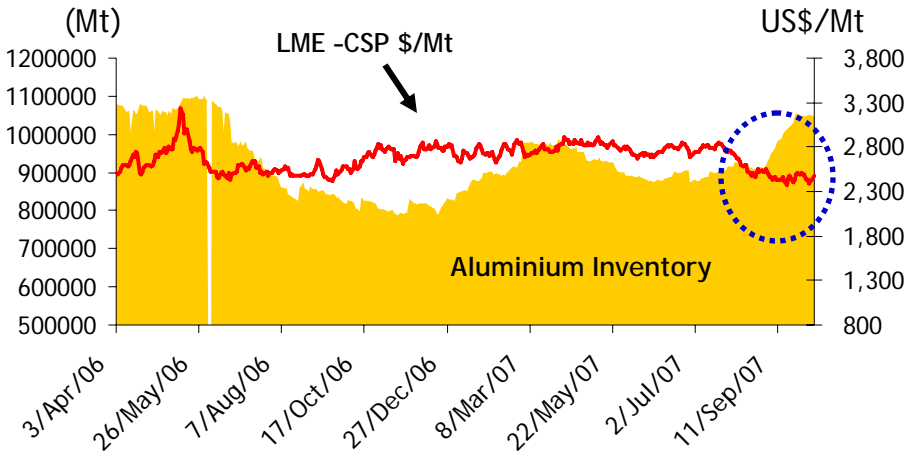
**Even with higher LME, Aluminium price has fallen in INR terms**

**Alumina prices continues to be soft**

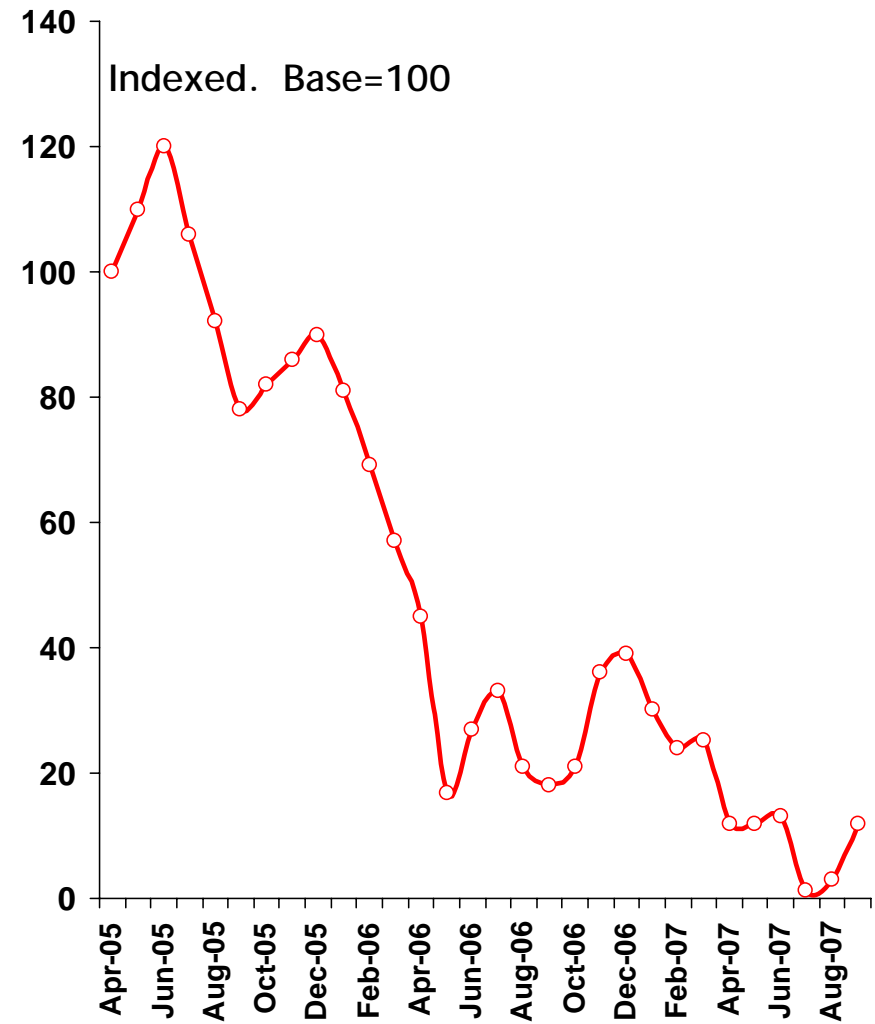


# Global Macro Trends -FY08

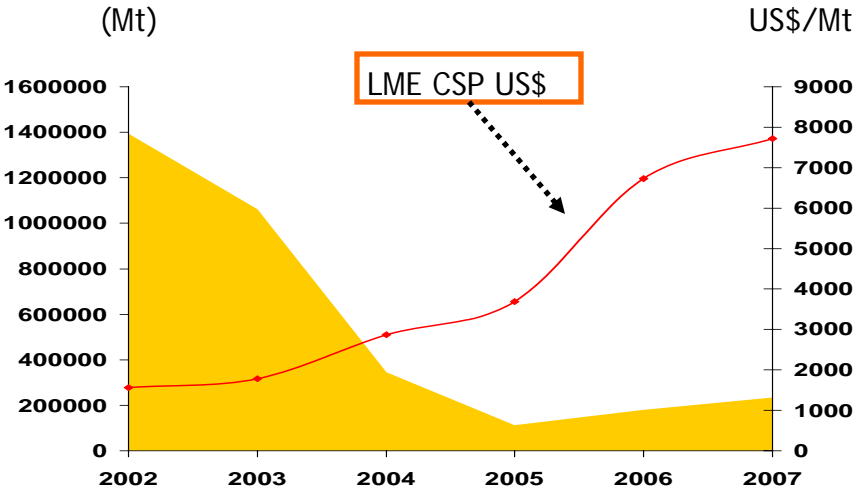
## Aluminium LME falling with increase in stock



## Weakening Spot TC/RC



## Copper LME continues to be strong with falling stock



# However, Hindalco continues to deliver through...



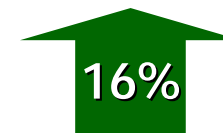
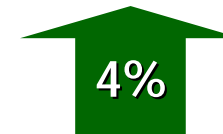
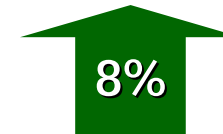
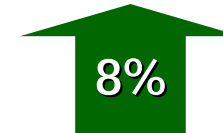
- Increased metal production
  - *Timely progress of Hirakud Phase-II expansion (grew by 41% compared to H1 FY07)*
  - *De-bottlenecking smelter assets at Renukoot- production enhanced by more than 4000Mt.*
- Copper anode production increased by 14 Kt on improved performance.
- Continued sweating of assets in downstream businesses resulting in
  - *10% increase in sheet production & 15% increase in Extrusion production.*
- Focus on the input costs - especially pertaining to major cost elements like Coal and Bauxite.

Acquisition of 45% stake of Utkal from Alcan completed



# H1 FY 2008 at a Glance

- Highest ever Aluminium production at 234426 T
- Highest ever revenue at Rs.9,638 Crores
- Net Profit at Rs.1,246 Crores
- Copper cathode Production at 158415 T



Vs H1 FY  
2007

Growth in Net Profit despite adverse business environment.

# Financial Highlights -Q2 & H1 FY08

(Rs. Cr)

(Mn US\$)

	Q2 FY08	Change (%)	H1 FY08	Change (%)	Q2 FY08	Change (%)	H1 FY08	Change (%)
Net Sales & Op. Revenue	4960	7%	9638	8%	1248	24%	2424	25%
EBIDTA	1031	-6%	2040	-3%	261	14%	515	14%
Pre-tax profits	824	-2%	1634	-1%	209	15%	413	15%
Net Profit	643	8%	1246	4%	163	25%	315	21%
EPS (Per Share)	5.78	-5%	11.25	-8%	0.14	8%	0.28	6%

Note: EBIDTA including other income

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## Aluminium Business Performance

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# Aluminium performance affected due to 8% drop in metal realisation



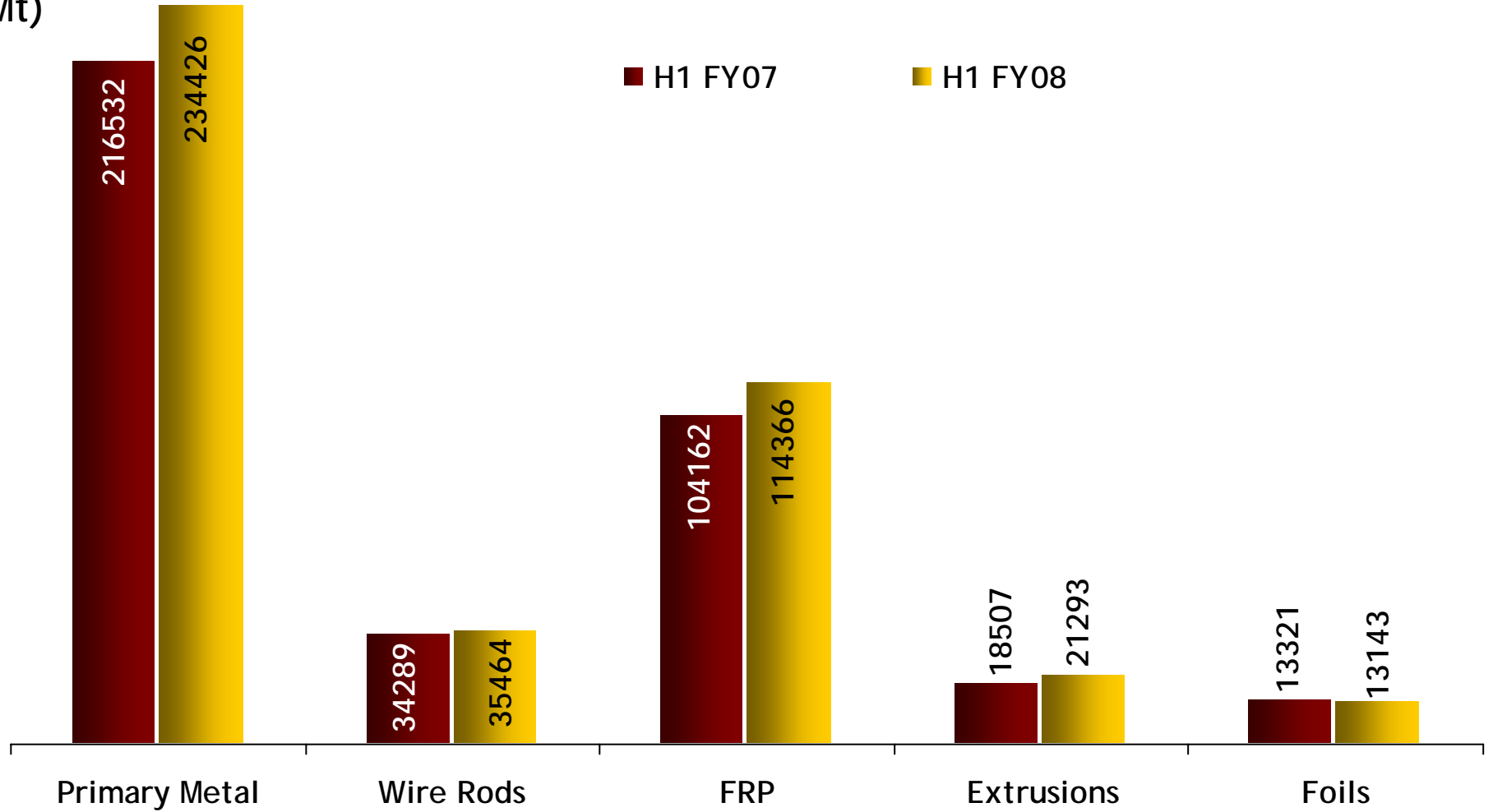
Aluminium

	Q2 FY08 (Rs. Crores)	Change (%)	H1 FY08 (Rs. Crores)	Change (%)
Net Sales & Operating Revenue	1785	-4%	3539	1%
EBIT	662	-1%	1304	-6%

*Note: As per SEBI Format*

# Production trend

(Mt)

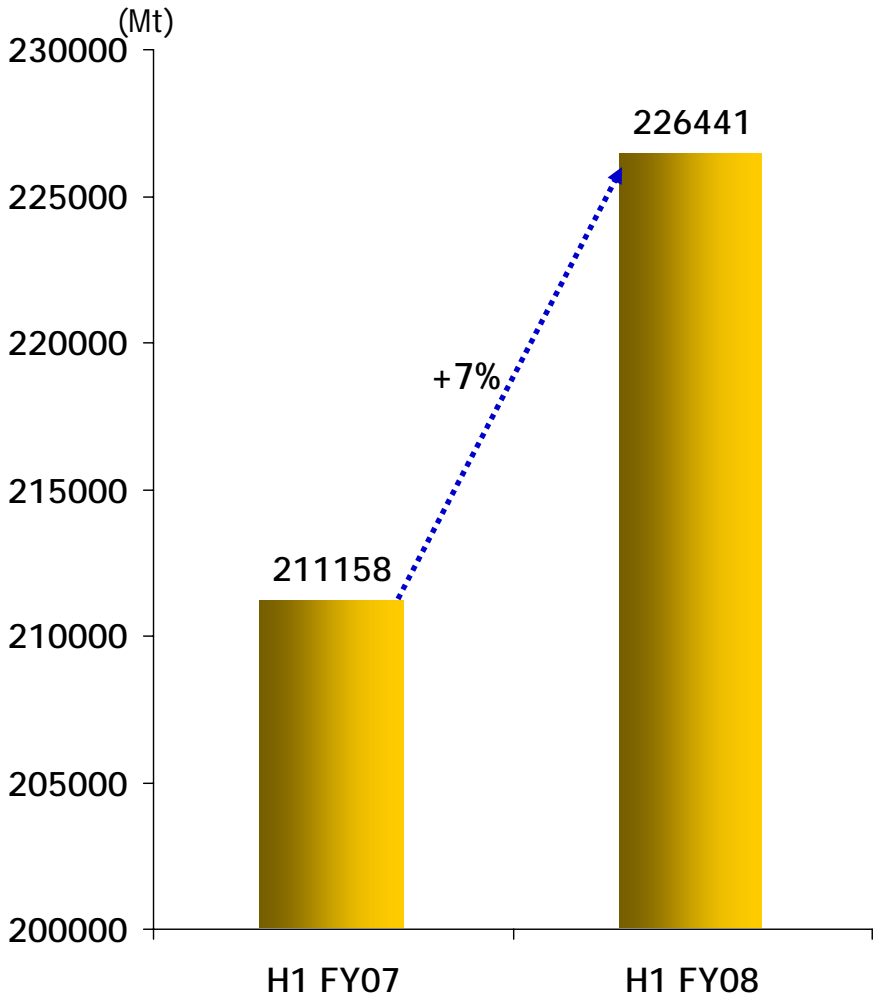


Source: Company Data

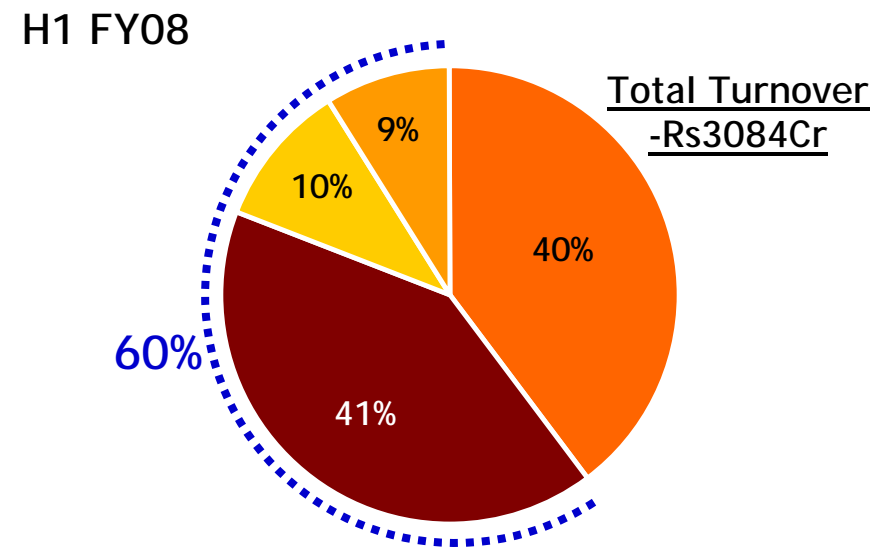
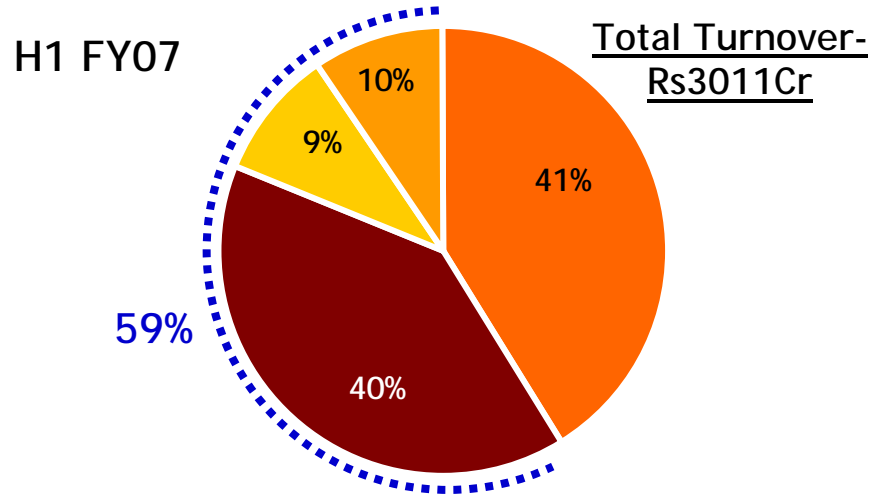
Allround improvement in production

# Sales

**Significant improvement in Aluminium sales volume**



**With higher value added proportion**

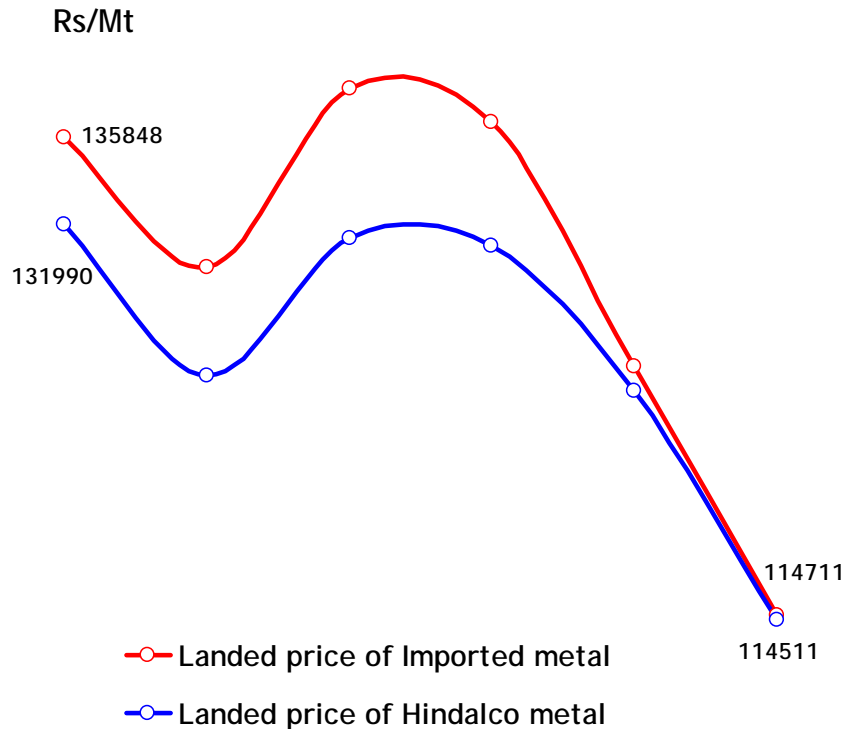


■ Primary 
 ■ Rolled 
 ■ Extrusions 
 ■ Foil & Wheel

# Sales Realisation

**Maximised metal realisation by bridging the landed price gap between Hindalco metal and Imported metal**

**Improved Markup of value added products**



- Rolled product markup for domestic business up by 4%
- Extrusion business markup improved by 20% as compared to H1 FY07
- This was achieved through improved realisation as well as better product mix.

Q1 FY07 Q2 FY07 Q3 FY07 Q4 FY07 Q1 FY08 Q2 FY08

# Allround Improvement in Cost

- Aluminium - Conversion cost down by 3% compared to H1 FY07.
  - *Energy cost in conversion cost down by 2% at 51%*
    - Achieved through better coal quality as well as improved power efficiency.
  - *Carbon cost lower by 1% at 26%*
    - Due to softening of Pitch cost as compared to last year
- Alumina (Hydrate) cost - down by 1% compared to H1 FY07.
  - *Maintained Bauxite cost at last year level by optimising the sourcing.*
  - *Improvement in operating efficiencies.*
- Value added products Conversion cost reduced compared to last year:
  - *FRP cost of production down by 1% compared to H1 FY07.*
  - *Extrusion production cost down by 5% compared to H1 FY07.*



# The Profitability being maintained at high levels

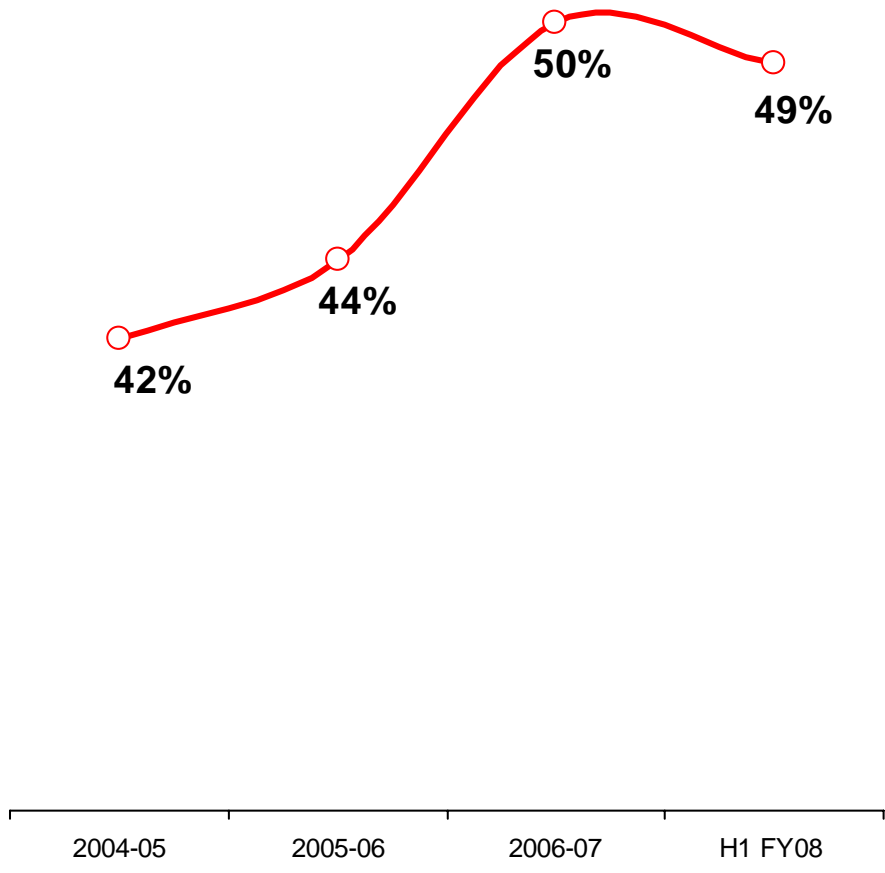
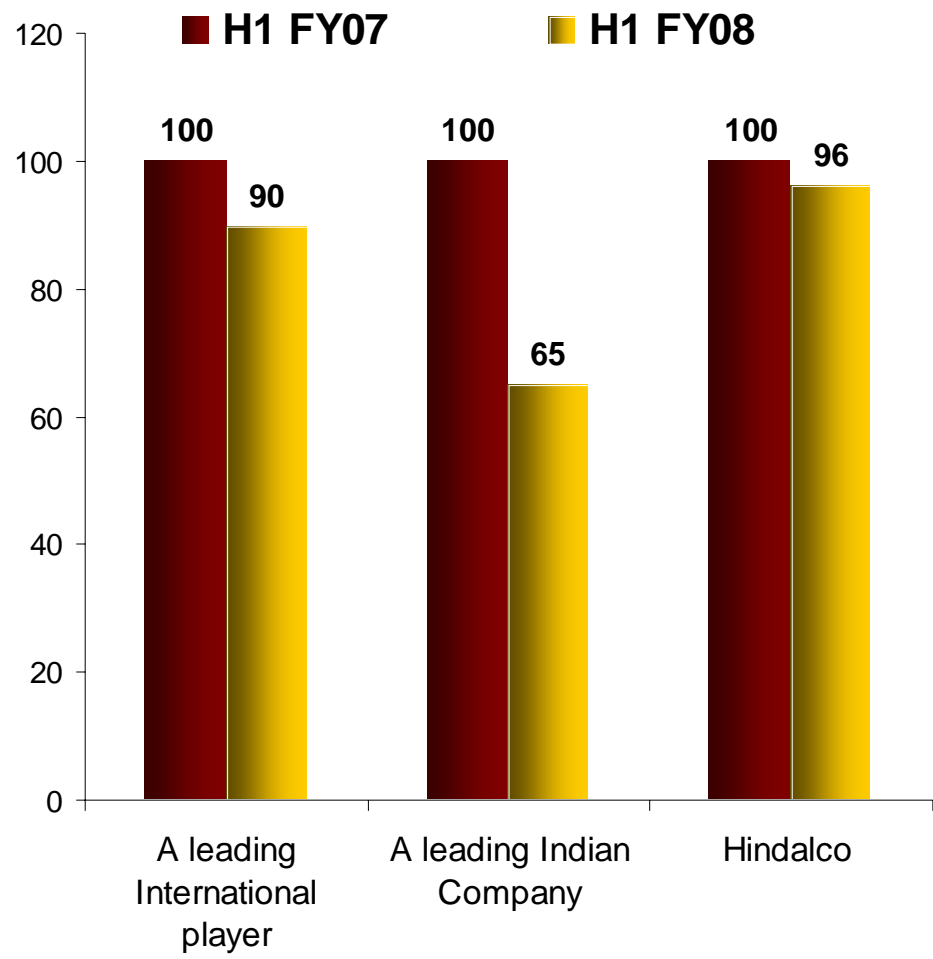


Aluminium

## Hindalco (AI) Vs Peers- EBIDTA for H1 FY08

## EBIDTA Margin maintained

Indexed. Base=100



Note: EBIDTA excluding Other income

Note: EBIDTA including Other income

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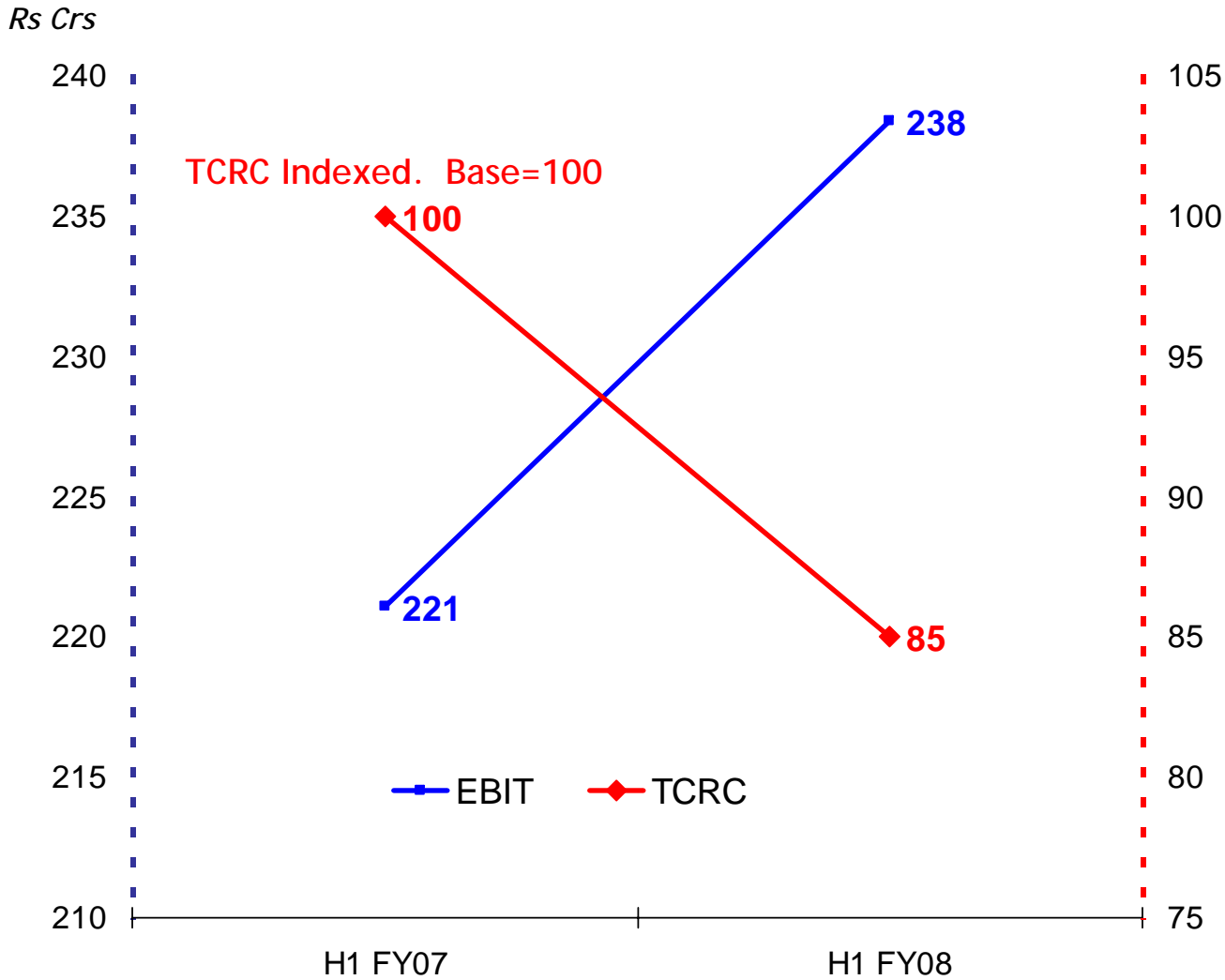
## Copper Business Performance

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# H1 FY 08 key levers of performance.....

- Cathode production rose by 16% compared to H1 FY07 to 158 KT.
- Continuous Cast Rod production rose by 29% compared to H1 FY07 to 69 KT.
- Copper sales rose by 18% compared to H1 FY07 to 157KT.
- Operating efficiency and Conversion cost improved.
- Though Backwardation slightly increased from 74\$/t to 79\$/t for 3M spread we gained by managing the hedge position.
- Better realization due to improved product mix (more domestic & CC rod).
- DAP Subsidy improved in line with cost.

# EBIT improved despite fall in TCRC



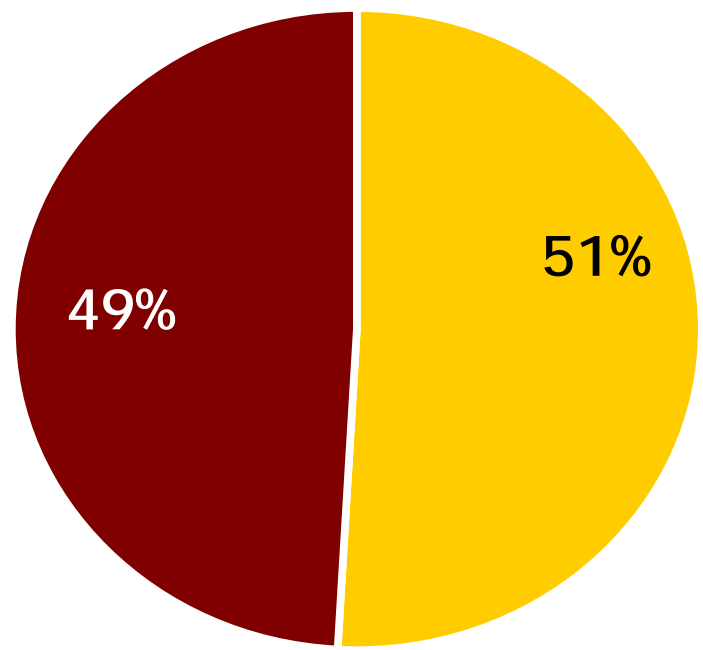
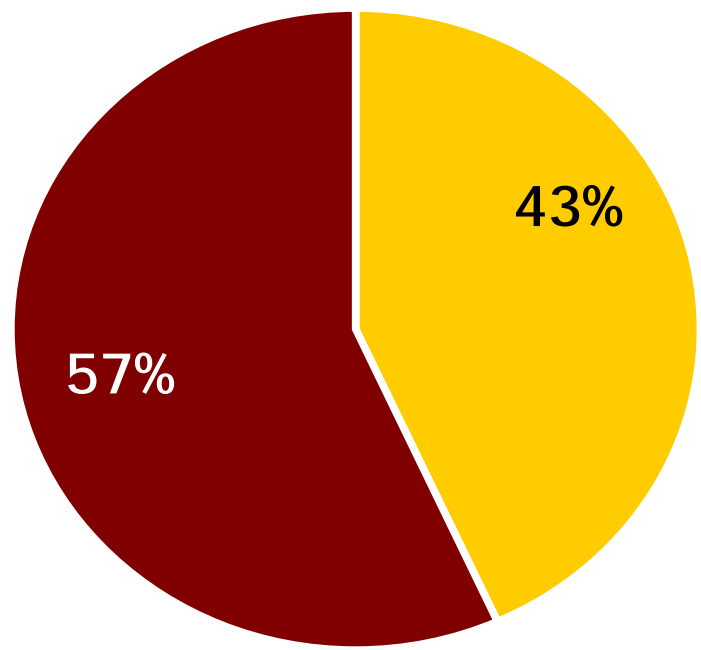
Achieved through better by-product realization and improvement in operational efficiency

# Improvement in Market Mix .....



H1 FY 07

H1 FY 08



Export Domestic

Benefits of increase in duty paid sales by 8 % eaten away by reduction in duty differential.

# Improvement in Operational Efficiency

### Energy Consumption of complex

GJ/t 23.6



H1 FY 07

16.2



H1 FY 08

Significant improvement in energy consumption compared to H1 FY 07

### GEB Drawl

(Mwh)

63158



H1 FY 07

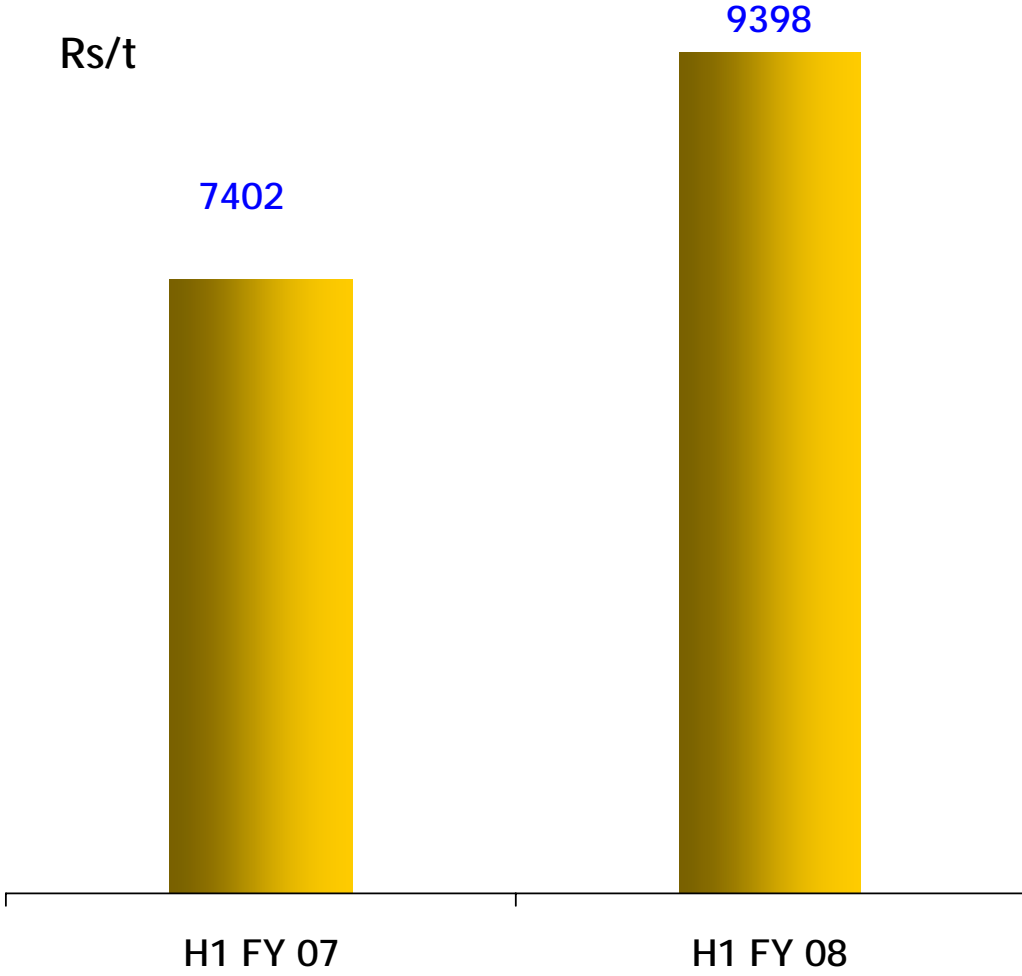
6057



H1 FY 08

Grid power usage has come down due to improved own power availability

# Improvement in By-product sales realization



DAP Subsidy improves to meet cost

# Copper Business Performance at a glance....



Copper

	Q2 FY08 (Rs. Crores)	Change (%)	H1 FY08 (Rs. Crores)	Change (%)
Net Sales & Operating Revenue	3178	14%	6105	6%
EBIT	126	2%	238	8%

*Note: As per SEBI format*



# ABML - Highlights for the Quarter

- Development of the Main Decline has been completed upto 23 level (bottom most level in the underground mine).
- More than 70% of total ore production is by Underground Crusher and Conveyor and is on increasing trend.
- Oxide ore stacking completed, leaching and cathode continues from heaps. Study on re-treatment of old heaps has been encouraging.
- Ongoing underground drilling has further extended mine life of MGO till the end of December 2009.
- Further explorations drilling is in progress in MGO to extend the mineralisation at depth with encouraging initial result.

# ABML - Further Exploration and Development



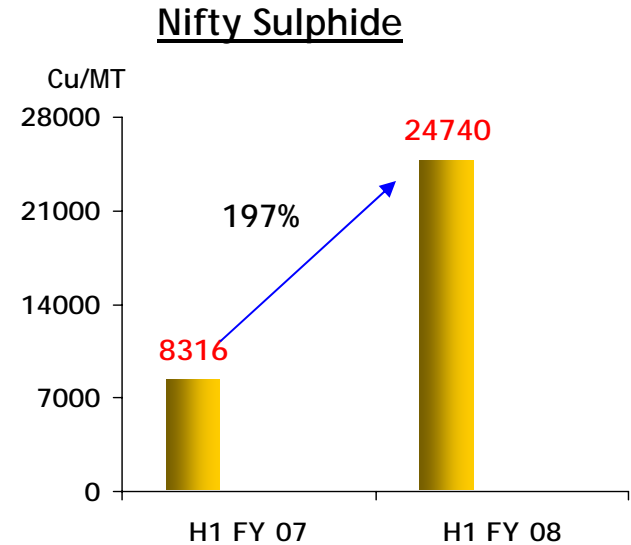
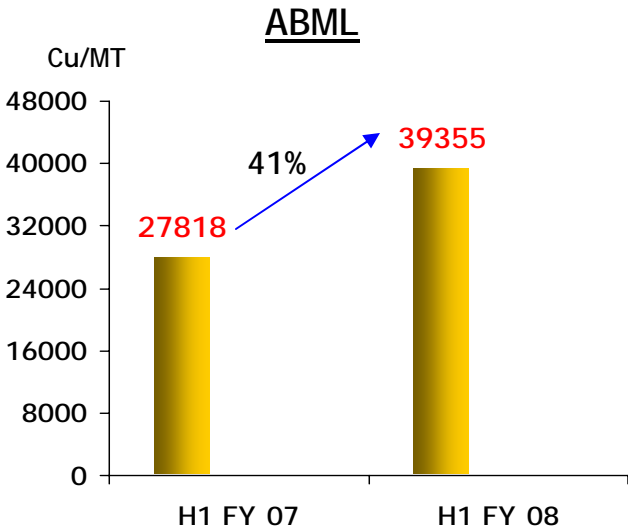
- Esperanza south - Geotechnical drilling and metallurgical test works have been completed and a Pre- Feasibility study report has been prepared.
- Maroochydore -- Exploration drilling has commenced to evaluate the feasibility. Resource evaluation using old historical data and new data is in progress.
- As a Part of Nifty Regional Exploration, zinc was identified (3m @ 10.96 % grade) at Duke Prospect (40 km north of Nifty). Follow up drilling is being planned.

# ABML H1 FY 08 Performance

## Financials

(Million A\$)	H1FY07	H1FY08	Chg (%)
Net Sales	168.4	317.2	88%
EBIDTA	46.0	107.9	135%
EBIT	21.2	83.4	293%

## Production



**ABML and Nifty Sulphide has achieved highest ever production during Sept'07**

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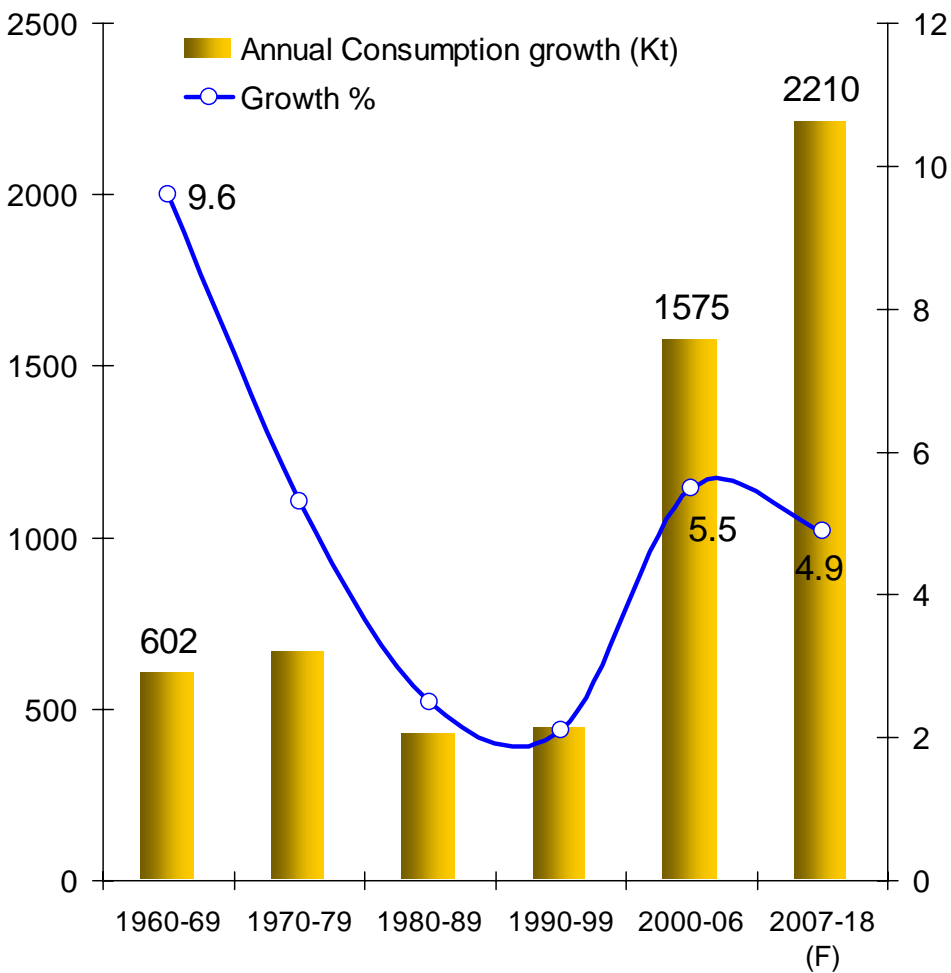
## Aluminium Outlook

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# Aluminium long term growth story intact...

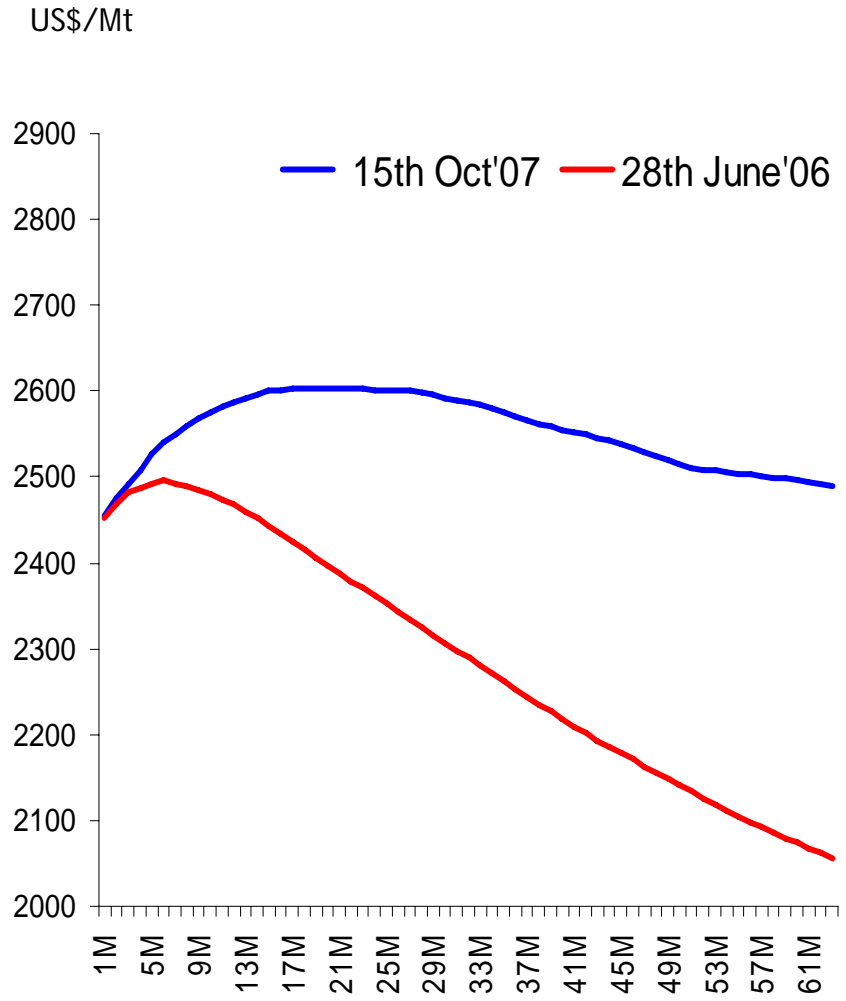


## World Aluminium demand to be strong in coming years



Source: Barclay's capital- Oct'07

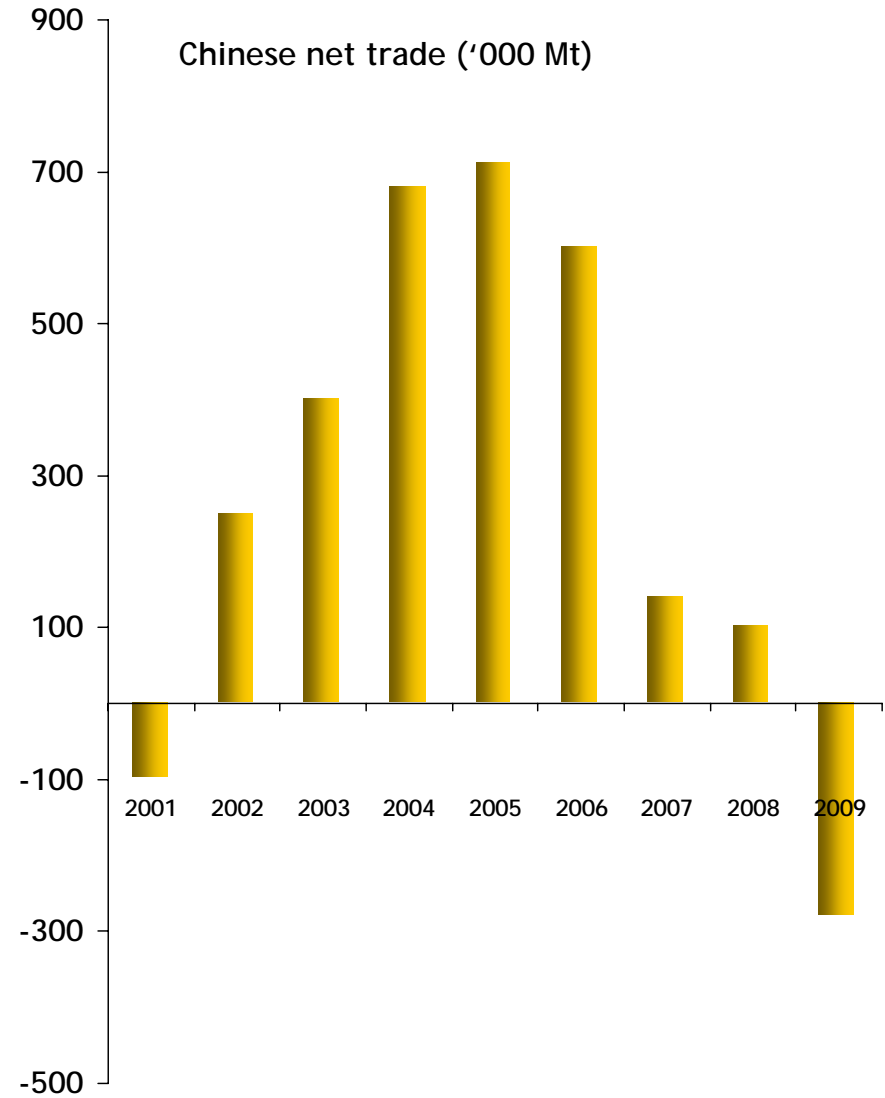
## Which reflects in strong forward curve



This means ~ 2.2 mn tonnes of capacity addition required every year.

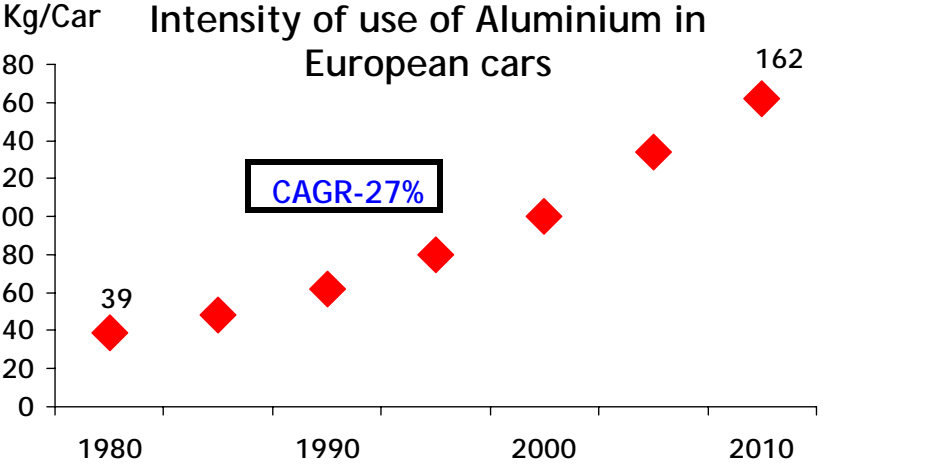
# Aluminium demand robust across the world...

## China to become net importer of Aluminium by 2009



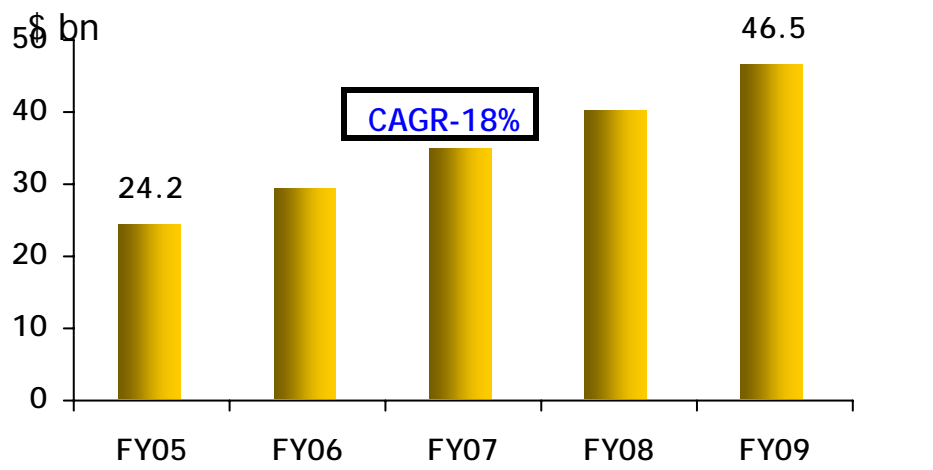
Source: Barclay's capital- Oct'07

## Aluminium demand in western countries also to be strong



Source: Barclay's capital- Oct'07

## Projected Infrastructure spending in India



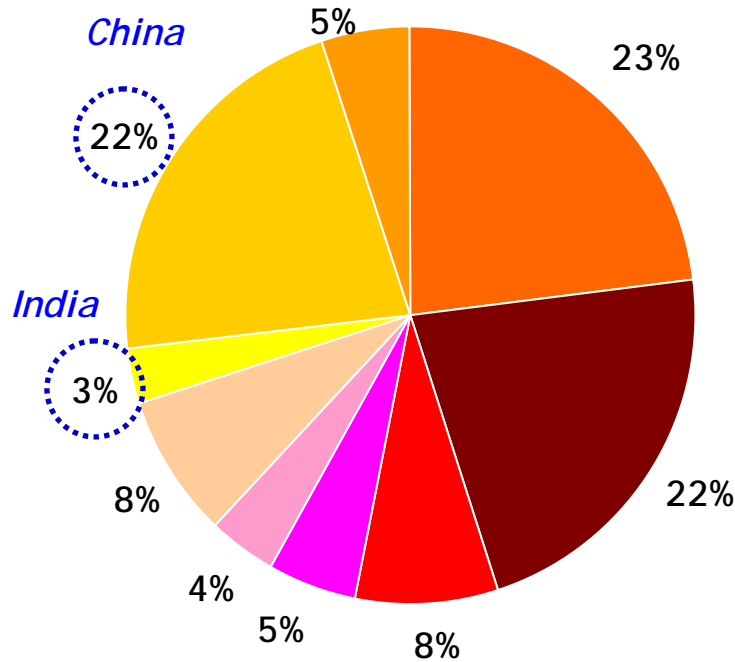
Source: Morgan Stanley

# By 2030, Aluminium consumption growth will be driven by China & India.



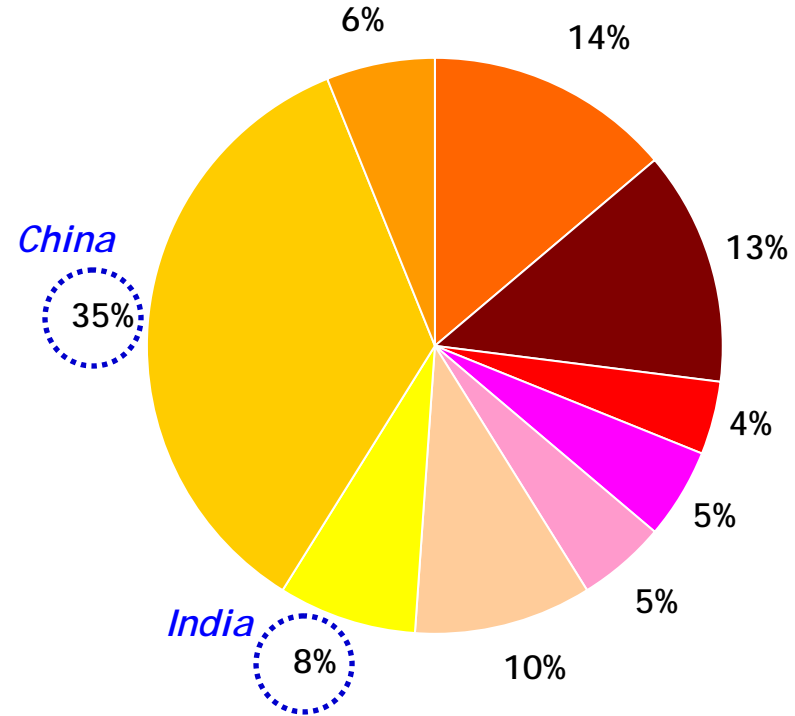
2005

World demand-31.9 Mn tonnes



2030

World demand-73.7 Mn tonnes

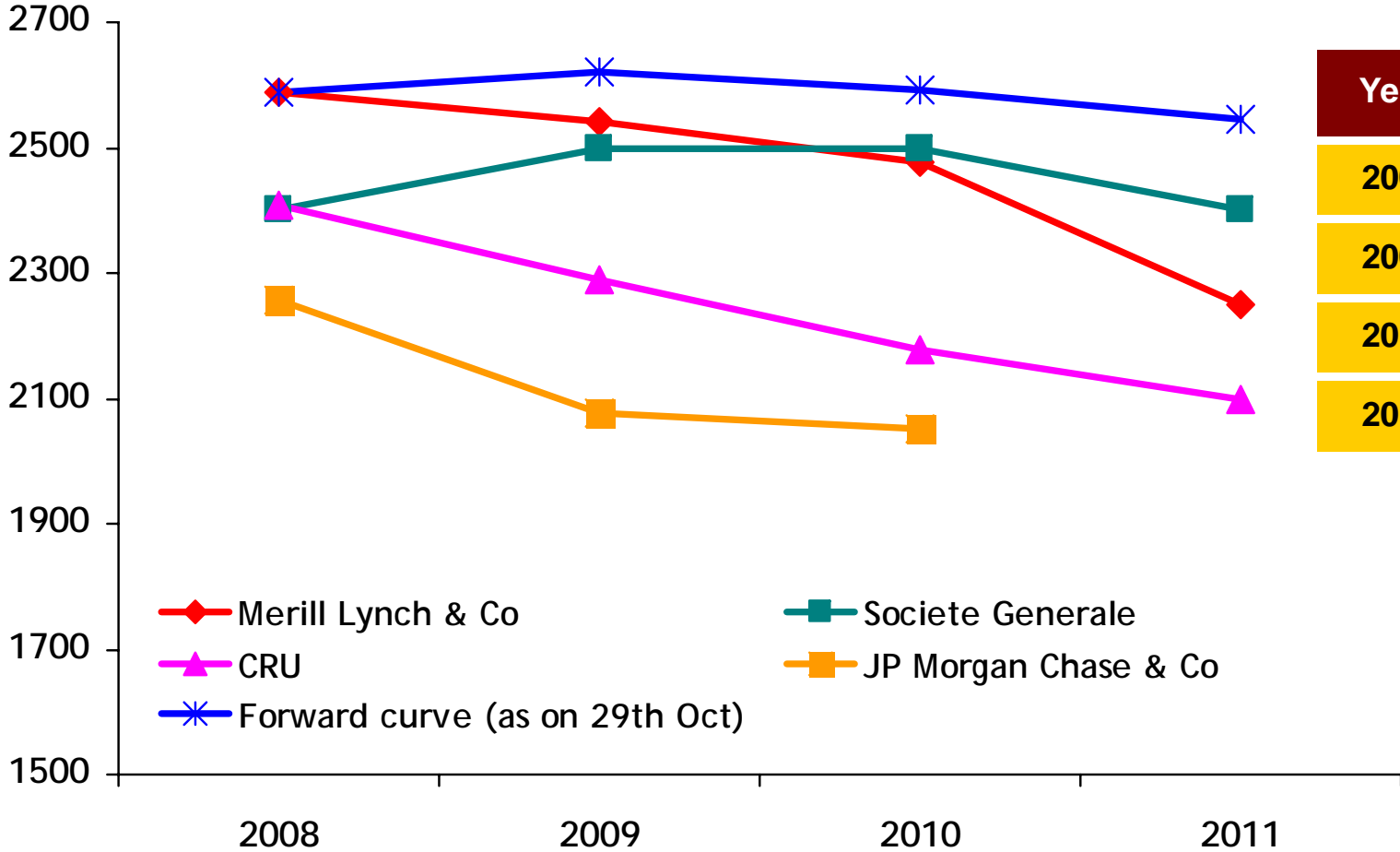


- North America
- EU/EEA
- Japan
- CIS & Other Europe
- Latin America
- SE Asia
- India
- China
- Others

Source: CRU June'07

**Aluminium demand in India to grow more than 5 fold by 2030**

# Aluminium price forecasts



Year	Average LME (USD/t)
2008	2413
2009	2351
2010	2301
2011	2249

Source Bloomberg/CRU

Aluminium price expected to remain strong in coming years

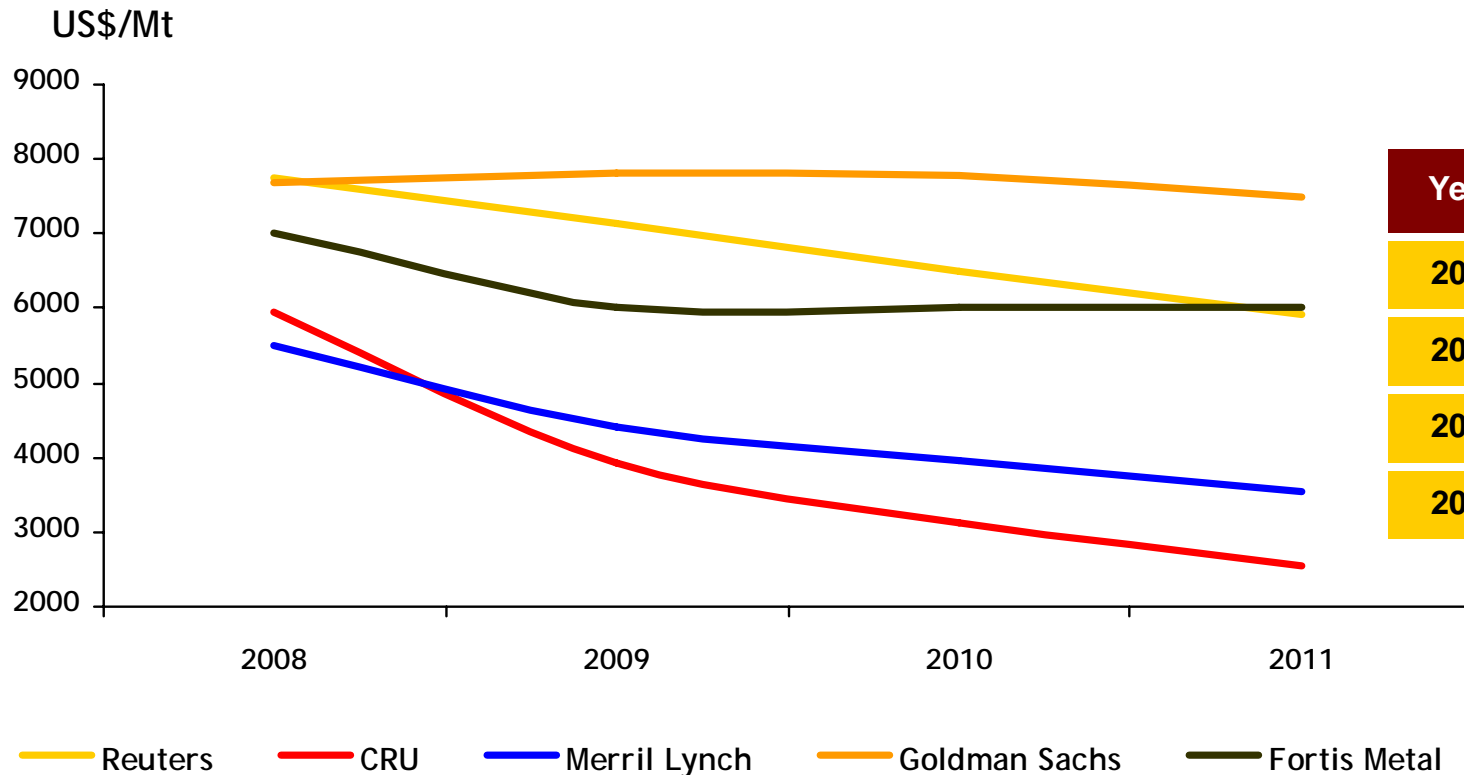


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## Copper Outlook

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# Copper Price Forecast and driving factor



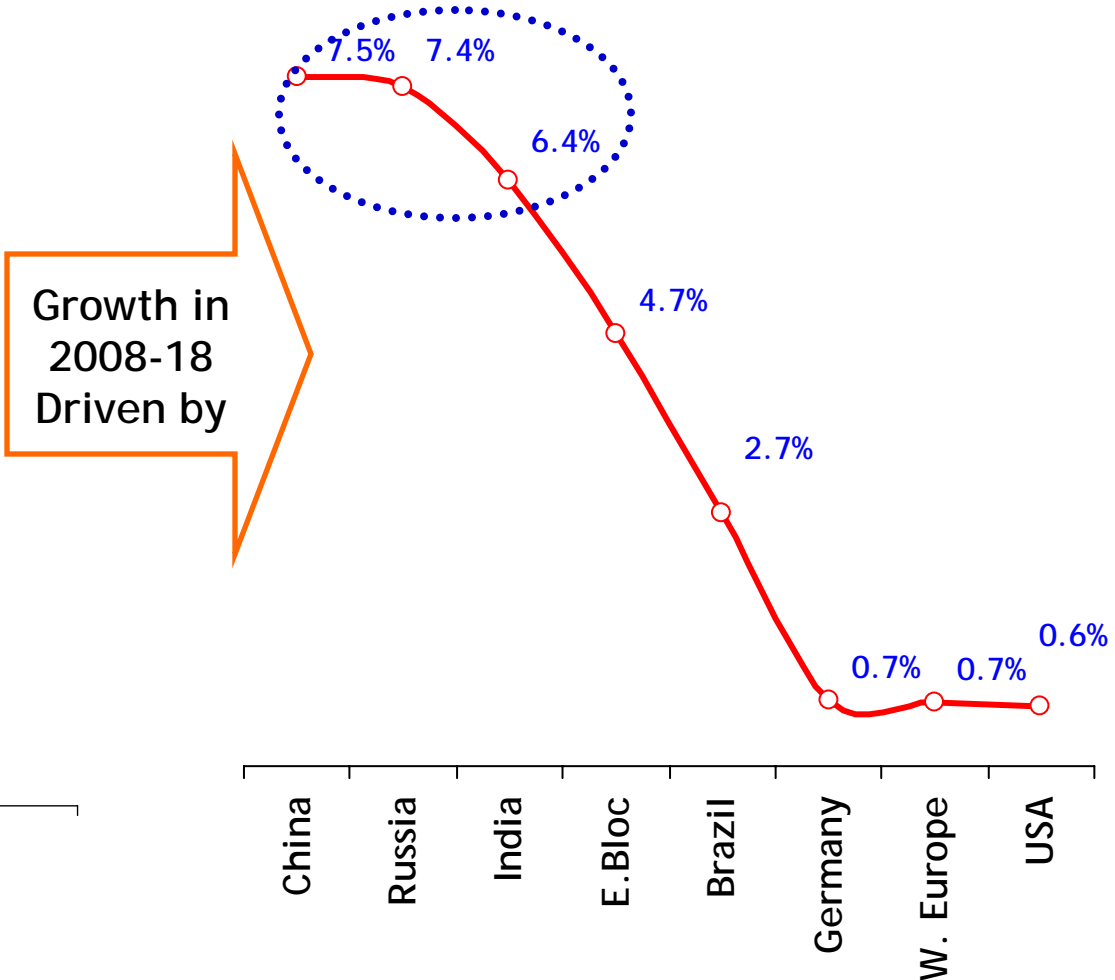
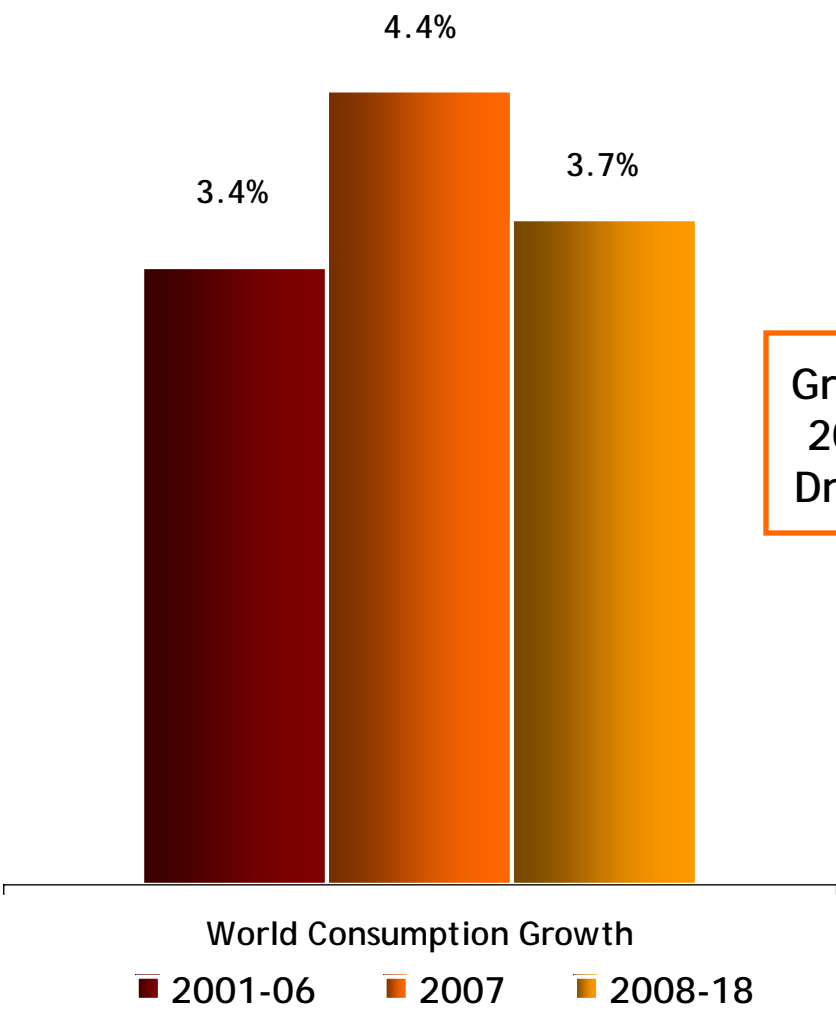
Year	Average LME (USD/t)
2008	6826
2009	5824
2010	5442
2011	5068

Source Bloomberg/CRU

## Copper Price Driving Factor :

- The copper price rally has been driven by : 1) Strong Chinese demand 2) Lack of investment in new mine capacity
- Prices have stayed strong over the past year because: 1) Inventories have remained extremely low 2) Chinese demand has surprised on the upside 3) Supply has continued to struggle to meet plans

# Refined Copper Consumption growth



Growth in 2008-18 Driven by

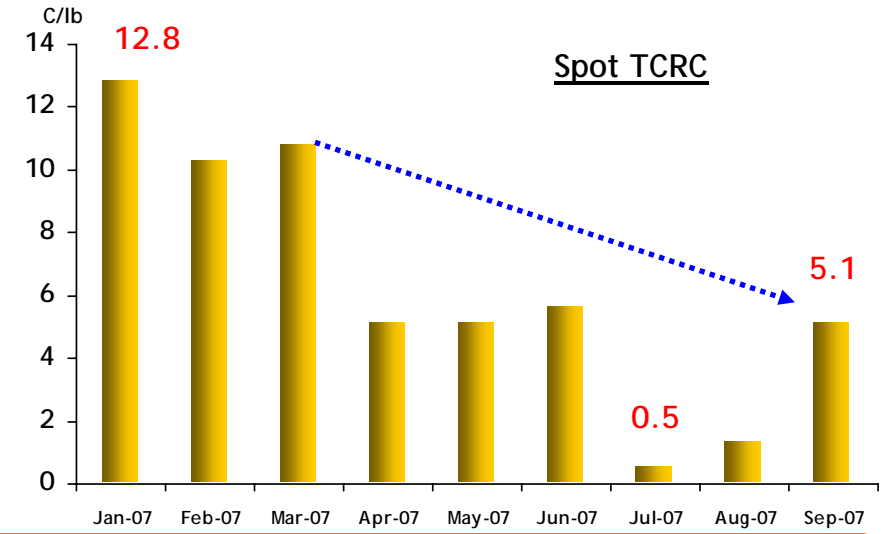
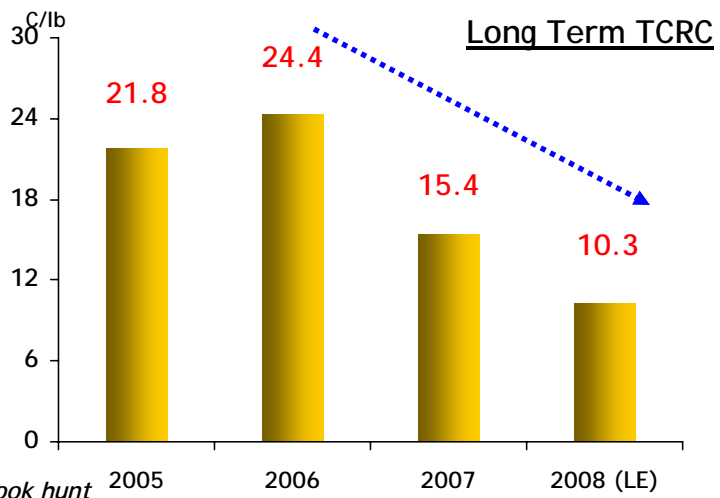
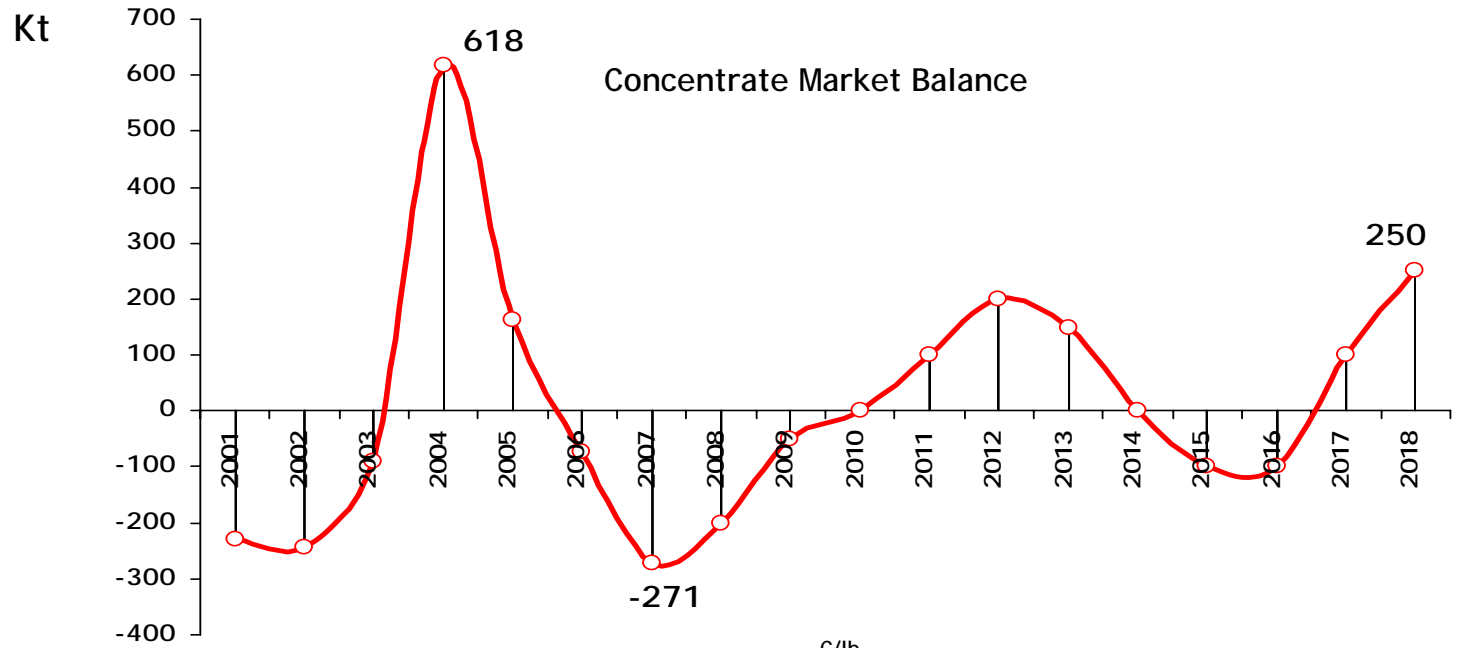
Source Q2 FY08- Brook hunt

China and Russia followed by India are the main drivers of copper demand thereby offsetting weaknesses elsewhere



Copper

# World Concentrate Market Balance



Source: Brook hunt

**Shortage of Concentrate affected both Long term and Spot TCRC**

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Highlights & Backdrop

Business Performance & Outlook

**Project Highlights**

Detailed Q2 FY08 Financials

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# Project Highlights: Hirakud Power

- Unit # 4 ( 100MW, Three boilers and single turbine) -
  - *Hydro-test of Boiler # 11 and # 10 completed.*
  - *Boiler # 11 light-up in 1st week November.*
  - *Turbine assembly in progress.*
  - *Generator placed on foundation.*
  - *Coal Handling Plant erection in progress.*
  - *Installation of ash handling equipment in progress.*



Power House structure Unit#4



Boiler # 11

# Hirakud Power



Generator on Foundation



CHP Gallery & Structure



C W Pump House & Cooling Tower



Ash Pipe rack to Silo

# Project Highlights: Hirakud Smelter Expansion

- Phase-I (35 kTPA expn.)-
  - *Pot line-4 completed in Dec'06 as per schedule & operation stabilized.*
  - *Efficiencies well within guaranteed levels.*
- Phase-II (43 kTPA expn.)-
  - *Conversion of Pot Line-3 completed in Jun'07, and all 146 pots of line#3 in operation and stabilized*
  - *Conversion of 1st group of 82 pots in Line-2 completed in September 07. Production in Q2 is 1632 tons.*
  - *Completion Date of Phase II: June '08*



Conversion of pot room #5



Structural erection of Alumina unloading system



# Project Highlights: Muri Expansion

- Basic & Detailed Engineering - Completed
- Environmental Clearance & Other Statutory Clearances - Obtained
- Land for future mud disposal site - Notification & acquisition by Govt. awaited
- Construction Status -
  - *Muri expansion Overall* - *98.8 % complete*
    - Power Plant Overall - 98.5% complete
    - Refinery Overall - 99 % complete
- Increased production level from Dec 07 after commissioning & stabilisation of Evaporation, Fine seed filtration & Security filtration during Nov 07
- High Temperature digestion from Jan 08

# Muri Expansion



Fine seed disc filter being assembled



High Temp. Digesters



Plant view - seed filters, growth precipitators etc



Pressure decanter recd. at site

# Muri Expansion



Mud filter section extension



Raw water treatment & Effluent plant



New Cogeneration Power plant view



New Alumina plant DCS facility recently commissioned

# Greenfield Projects - Utkal Alumina

- Bauxite Mining Capacity of 4,500 KTPA & Refining capacity of 1,500 KTPA.
- Basic Engineering documents - all 21 packages received from Alcan and review is in final stages of completion by UHDE.
- Detailed Engineering in progress for Non-Alcan areas as well as for Alcan areas.
- Land: 93% of total land is in possession. A few gaps in Boundary Wall are to be completed.
- Mines detailed Engineering started. Mining to start by March 2009. Plant to mines link, road work commenced.
- Environment Clearance
  - *Presentation to Expert Committee, MoEF completed for increase in capacity of Refinery to 3,000 KTPA*
  - *Expert committee meeting for increase in capacity of mines to 8,500 KTPA expected to be held by December 2007.*
- Mechanical Completion Date - Mar' 2010

# Utkal Alumina



Bridge No 1 and 2 - Open for vehicular movement



Non-plant buildings - Piling work commenced



Hard rock cutting - drilling WIP

# Mahan Aluminium Project



- Smelter Capacity- 358 kTPA & CPP capacity - 750 MW
- Land: Deposited Rs 53 Crores for acquisition of 2999 acres of private land. Section 4 notification published on 15<sup>th</sup> August 07 & Public Hearing conducted on 5<sup>th</sup> October 07.
- Coal: Coal block allotted on Apr'06 in JV with ESSAR. JV formed.
  - *Production of Coal likely to start from Oct'09*
- Water: Water resource department of GOMP has allocated 45.12 cusecs of water
- Environmental Clearances:
  - *Application has been submitted to MOEF on 31st January 07 and TOR obtained from MoEF on 18<sup>th</sup> July 2007. EMP will be submitted to MoEF by Jan 08*
- Expected Commissioning: Oct'2011

# Latehar Aluminium Project



- Smelter Capacity- 358 kTPA & CPP capacity - 750 MW
- Tubed Coal Mine Allotted-
  - *Formation of joint venture between Tata power and Hindalco in progress.*
- Land Acquisition: Land acquisition of 5400 acres in progress
- Power: Sanction for 5MVA obtained.
- Environmental clearances: Application has been submitted to MOEF on 14th May 07. TOR has been approved by MoEF on 5th September 2007. EMP based on above TOR is under preparation.
- Expected Commissioning: Mar'2012

# Aditya Aluminium

- Bauxite Mining Capacity - 4,500 KTPA & Refining Capacity - 1,500 KTPA.
- Smelter Capacity - 358 KTPA & CPP Capacity - 900 MW.
- Technology Agreement signed with Aluminium Pechney for Aluminium Smelter
- Land: 1360 Acres of Land registered for Smelter, 440 Acres(Koraput) & 34 Acres(Rayagada) registered on IDCO for Refinery
- Water: Agreement signed for drawal of water(52.73 Cusec for Smelter, 10.41 Cusec for Refinery)
- Coal Block JV agreement signed ( MCL,NLC and HIL for Talabira 2,3)
- Environment Clearance obtained for Refinery, Smelter and Power Plant. Expert committee meeting scheduled for EC for Kodingamali mine
- Expected Commissioning : Mar- 2011(Smelter), May-2011(Alumina).



# To Sum Up

- It has been a very difficult quarter and the trend is expected to continue.
- Management anticipated the adverse trend reasonably accurately and the remedial steps taken to face the emerging challenges seem to have paid off.
- Copper TCRC will continue to be a major negative influence on Copper Business. Enhanced asset productivity along with containment of input costs will be key - going forward.
- Domestic consumption growth for both aluminium and copper will certainly auger well for Hindalco.

So, inspite of major challenges in the coming volatile period, the Management feels confident to face them and endeavor to maintain the growth trend.

Highlights & Backdrop

Business Performance & Outlook

Project Highlights

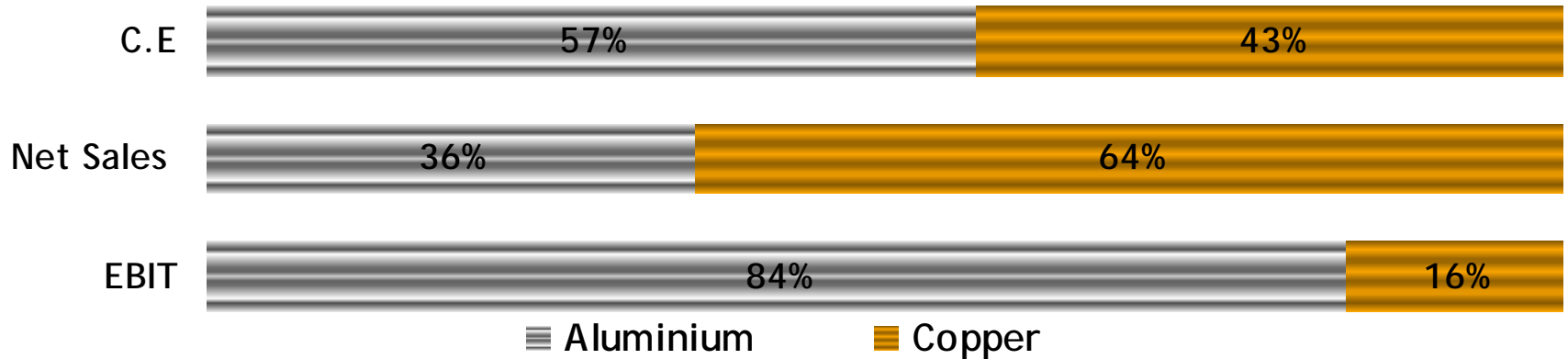
Detailed Q2 FY08 Financials

# Financials



Rs.Crs.	Q2 FY 08	Q2 FY 07	% Chng	H1 FY 08	H1 FY 07	% Chng
Net Sales	4959.7	4634.2	7%	9637.6	8907.9	8%
Total Expenditure	4038.0	3647.8	11%	7831.6	6988.2	12%
Other Income	109.8	110.8	-1%	234.4	188.4	24%
PBDIT	1031.4	1097.2	-6%	2040.4	2108.1	-3%
Depreciation	144.5	207.9	-30%	287.3	342.0	-16%
PBIT	886.9	889.3	0%	1753.0	1766.1	-1%
Interest & Finance Charges	63.2	51.5	23%	119.4	114.9	4%
Profit Before Tax	823.7	837.7	-2%	1633.6	1651.2	-1%
Provision for Taxes	180.9	240.1	-25%	387.9	452.1	-14%
PAT	642.7	597.6	8%	1245.7	1199.1	4%
Annualised E.P.S. (Rs.)	23.1	24.3	-5%	22.5	24.3	-8%

# Segmental Results Q2 FY08



Rs Crs.	Aluminium			Copper		
	Q2 FY08	Q2 FY07	% Chg	Q2 FY08	Q2 FY07	% Chg
Net Sales	1785	1852	-4%	3178	2783	14%
EBIT	662	671	-1%	126	123	2%
EBIT Margin	37.1%	36.2%		4.0%	4.4%	
Capital Employed	7674	6789	13%	5865	7324	-20%
Annualized ROCE (%)	35.0%	40.2%		9.3%	8.0%	

# Aluminium : Production

	Unit	Q2 FY08A	Q2 FY07A	% Chg	H1 FY08A	H1 FY07A	% Chg
Alumina	MT	282,292	290,462	-3%	584,722	589,911	-1%
Metal	MT	118,257	109,376	8%	234,426	216,532	8%
Wire Rods	MT	18,031	17,255	5%	35,464	34,289	3%
Rolled Products	MT	57,273	52,052	10%	114,366	104,162	10%
Extrusions	MT	11,107	9,869	13%	21,293	18,507	15%
Foil	MT	6,618	6,715	-1%	13,143	13,321	-1%
Wheels	Nos.	41,576	53,958	-23%	86,152	100,064	-14%
Power	MU	2,102	2,192	-4%	4,266	4,153	3%

# Copper : Production

Production	Unit	Q2 FY08	Q2 FY07	% Chg	H1 FY08	H1 FY07	% Chg
Copper Cathodes	MT	79,181	71,391	11%	158,415	136,061	16%
CC Rods	MT	35,335	26,711	32%	69,430	54,016	29%
DAP/NPK	MT	34,117	53,280	-36%	70,337	125,782	-44%
Sulphuric Acid	MT	245,371	249,586	-2%	488,492	461,243	6%
Gold	Kgs	3,543	1,481	139%	5,313	4,193	27%
Silver	Kgs	13,166	10,731	23%	22,109	20,254	9%

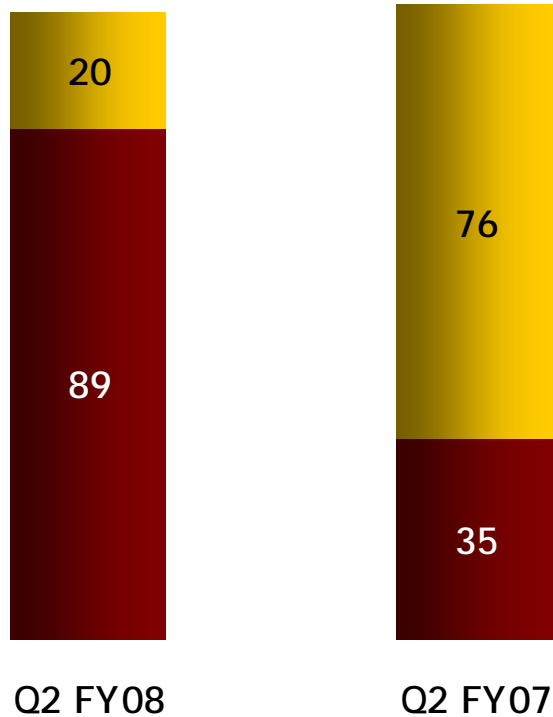
# Summary



Rs.Crs.	Segment Information		Company Information				
	AI EBIT	Cu EBIT	Interest	Other Income	PBT	Tax	PAT
Q2 of FY07	671.0	123.3	-51.5	110.8	837.7	-240.1	597.6
Q2 of FY08	662.1	126.1	-63.2	109.8	823.7	-180.9	642.8
Change	-8.9	2.8	-11.7	-1.0	-14.0	59.2	45.2

Unallocable other income Q2 FY07 Rs.94.9Cr; Q2 FY08 Rs.98.7Cr

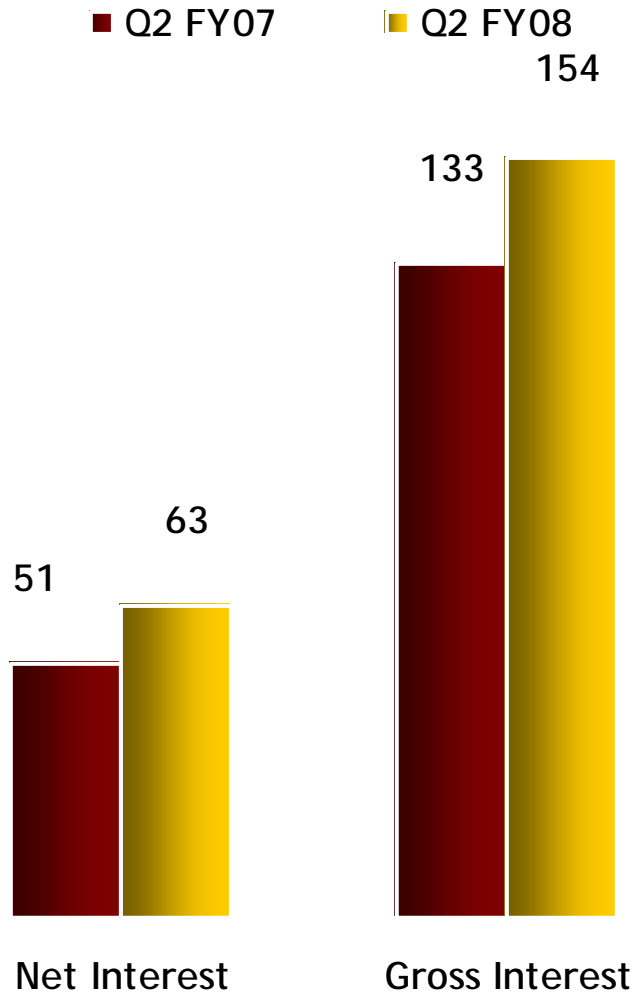
# Treasury income - Q2FY08



- Other Income is almost same compared to previous year
- Lower interest income on income tax refund at Rs.9.5 Crs against Rs.48.4 Crs. in corresponding quarter of previous year.
- Treasury income higher compared to corresponding quarter of last year
  - *Higher pre-tax treasury yield and Higher Average Treasury*
    - *Rights issue proceeds*
    - *Preferential issue*
    - *Reduction in working capital at Copper division*
    - *Net of Novelis investment*



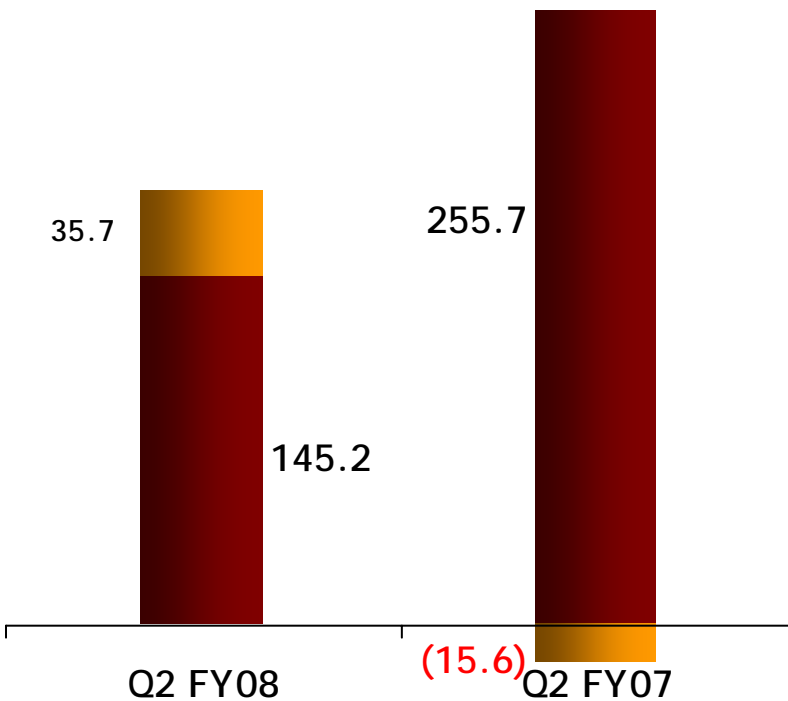
# Interest Q2FY'08



- Gross and Net interest is higher compared to last year due to
  - *Higher average borrowing*
  - *Syndicated loan was drawdown July 06.*
  - *Higher average interest rate at 7.35% vs 7.10% in corresponding quarter.*

# Taxes Q2FY'08

■ Current Tax      ■ Deferred Tax



- Provision for Taxes lower mainly due to :-
  - Decrease in effective tax rate from 28.7% to 22% due to proportionately higher exempt income in the current Quarter
  - Higher capitalization led to lower current tax and higher deferred tax

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**THANK YOU**

ADITYA BIRLA GROUP

# Aluminium : Sales Revenue

Sales Revenue	Unit	Q2 FY08	Q2 FY07	% Chg	H1 FY08	H1 FY07	% Chg
Alumina	Rs.Crs.	146.5	210.6	-30%	309.8	393.2	-21%
Primary Metal	Rs.Crs.	400.8	421.8	-5%	793.6	793.6	0%
Wire Rod	Rs.Crs.	209.4	226.6	-8%	428.0	448.3	-5%
Rolled Products	Rs.Crs.	657.6	631.3	4%	1267.5	1201.9	5%
Extrusions	Rs.Crs.	169.7	150.4	13%	322.0	279.4	15%
Foils	Rs.Crs.	123.3	134.3	-8%	252.8	267.8	-6%
Wheels	Rs.Crs.	9.5	11.1	-15%	19.2	20.4	-6%
Others	Rs.Crs.	68.3	65.9	4%	145.9	101.4	44%
<b>Net Sales</b>	<b>Rs.Crs.</b>	<b>1784.9</b>	<b>1851.9</b>	<b>-4%</b>	<b>3538.7</b>	<b>3506.1</b>	<b>1%</b>
Of which Exports	Rs.Crs.	362.1	426.8	-15%	712.0	808.9	-12%

# Copper : Sales Revenue

Rs.Crs	Q2FY08	Q2 Y07	% Chg	H1FY08	H1FY07	% Chg
Copper Cathodes	1,375.0	1,532.0	-10%	2,784.2	2,836.2	-2%
CC Rods	1,257.4	947.6	33%	2,381.4	1,832.8	30%
DAP/NPK	63.1	89.6	-30%	119.1	207.1	-42%
Sulphuric Acid	24.2	12.6	92%	41.6	22.8	82%
Gold	309.5	150.7	105%	461.8	394.3	17%
Silver	22.8	20.2	13%	40.1	37.3	7%
Others	126.3	29.8	324%	276.4	73.7	275%
<b>Total Sales</b>	<b>3,178.3</b>	<b>2,782.5</b>	<b>14%</b>	<b>6,104.5</b>	<b>5,404.2</b>	<b>13%</b>
of which Exports (FOB)	1,296.2	1,416.4	-8%	2,625.1	2,615.3	0%

# Aluminium : Sales Volume

Sales Tonnage	Unit	Q2 FY08	Q2 FY07	% Chg	H1 FY08	H1 FY07	% Chg
Alumina	MT	63,516	87,820	-28%	140,088	156,337	-10%
Primary Metal	MT	36,697	35,372	4%	69,088	65,420	6%
Wire Rod	MT	18,005	17,556	3%	35,322	34,192	3%
Rolled Products	MT	46,945	42,354	11%	89,096	81,016	10%
Extrusions	MT	11,145	9,662	15%	20,735	17,778	17%
Foils	MT	6,432	6,325	2%	12,201	12,752	-4%
Wheels (Nos)	Nos	45,798	52,007	-12%	92,271	98,589	-6%

# Copper : Sales Volume

Sales Volumes	Unit	Q2FY08	Q2FY07	% Chg	H1 FY08	H1 FY07	% Chg
Copper Cathodes & Others	MT	43,327	42,266	3%	88,015	80,279	10%
CC Rods	MT	35,318	25,690	37%	69,048	53,261	30%
DAP/NPK	MT	30,440	55,664	-45%	68,095	129,364	-47%
Sulphuric Acid	MT	205,939	144,841	42%	378,593	251,514	51%
Gold	Kg	3,503	1,671	110%	5,233	4,383	19%
Silver	Kg	13,165	11,528	14%	22,642	20,592	10%