



# **National Aluminium Company Limited**

**Integrated operations : Bauxite – Alumina – Aluminium – Power**

## **Investor Presentation**

# SPECTRUM OF OPERATIONS



**Bauxite Mine**  
Panchpatimali

- 8<sup>TH</sup> LARGEST BAUXITE DEPOSIT IN THE WORLD.
- LOW ENERGY CONSUMPTION.
- 6.3 MTPA CAPACITY- BEING EXPANDED TO 6.8 MTPA
- MECHANIZED MINES WITH HIGH PRODUCTIVITY.
- TRANSPORT THROUGH CONVEYOR BELT (14.6 KM).

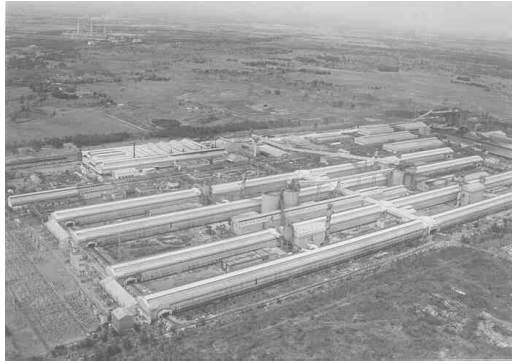


**Alumina Refinery**  
Damanjodi

- 2.1 MTPA CAPACITY
- SPL. HYDRATES, SPL. ALUMINA AND ZEOLITE.
- CO-GENERATION POWER OF 74 MW FROM PROCESS STEAM.
- DE-BOTTLENECKING TO INCREASE CAPACITY TO 2.275 MTPA UNDER COMMISSIONING.



## SPECTRUM OF OPERATIONS



**Aluminium Smelter**  
Angul

- CAPACITY 0.46 MTPA
- TECHNOLOGY FROM RTA.
- AMONG LOW COST PRODUCERS.
- INGOTS, BILLETS, WIRE RODS, SOWS , STRIP COILS & T-INGOTS.
- 45,000 MT CAPACITY ROLLED PRODUCTS UNIT.



**Thermal Power Plant**  
Angul

- CAPACITY: 1200 MW .
- ADVANCED ELECTROSTATIC PRECIPITATOR (99.9% EFFICIENCY) TO CONTROL POLLUTION.
- ZERO DISCHARGE OF EFFLUENTS.



**Port facility**  
Vizag

- CAPACITY TO HANDLE SHIPS UPTO 40,000 DWT.
- MECHANIZED MOBILE SHIP LOADER.
- MECHANIZED LOADING & UNLOADING FACILITY.
- EXPORT OF ALUMINA AND IMPORT OF CAUSTIC SODA.

## SPECTRUM OF OPERATIONS



### **Wind Power Plant**

**Andhra Pradesh**

- CAPACITY: 50.40 MW
- POWER PURCHASE AGREEMENT SIGNED WITH APSPDCL
- COMMISSIONED IN DEC'2012



# **PRODUCTION**

	Q - 1 FY-12-13	Q - 2 FY-12-13	Q - 3 FY-12-13	Q - 4 FY-12-13	FY-12-13	FY-11-12
<b>Bauxite (MT)</b>	<b>1,141,838</b>	<b>1,220,369</b>	<b>1,189,959</b>	<b>18,67,225</b>	<b>5,419,391</b>	<b>5,002,626</b>
<b>Alumina Hydrate (MT)</b>	<b>476,300</b>	<b>397,500</b>	<b>396,500</b>	<b>5,31,700</b>	<b>1,802,000</b>	<b>1,687,000</b>
<b>Aluminium (MT)</b>	<b>102,841</b>	<b>102,274</b>	<b>100,207</b>	<b>98,062</b>	<b>403,384</b>	<b>413,089</b>
<b>Electricity (MU)</b>	<b>1,614</b>	<b>1,443</b>	<b>1,525</b>	<b>1,509</b>	<b>6,091</b>	<b>6,200</b>

**Electricity includes 15 MU produced during 4<sup>th</sup> quarter of current year from wind power plant**



# **SALES**

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	Q -1-12-13	Q -2-12-13	Q -3-12-13	Q-4-12-13	FY-12-13	FY-11-12
<b>Alumina – Export (MT)</b>	<b>242,731</b>	<b>182,895</b>	<b>212,794</b>	<b>305,697</b>	<b>944,117</b>	<b>792,552</b>
<b>Alumina – Domestic (MT)</b>	<b>10,399</b>	<b>10,897</b>	<b>8,118</b>	<b>11,191</b>	<b>40,605</b>	<b>50,253</b>
<b>Aluminium - Export (MT)</b>	<b>35,459</b>	<b>30,923</b>	<b>39,466</b>	<b>38,313</b>	<b>144,161</b>	<b>98,399</b>
<b>Aluminium - Domestic (MT)</b>	<b>66,730</b>	<b>69,887</b>	<b>62,147</b>	<b>60,177</b>	<b>258,941</b>	<b>317,517</b>



## Summary Financials (Rs. In crore)

Particulars	Quarter Ended				Year	
	Jun'12	Sep'12	Dec'12	Mar'13	12-13	11-12
Net Sales	1,718	1,586	1,670	1,835	6,809	6,500
Other Op. Income	30	22	23	32	107	111
Other Non Op. Income	140	139	112	119	511	542
Total Income	1,888	1,747	1,805	1,986	7,427	7,153
Less : Operating Cost	1,444	1,610	1,510	1,445	6,010	5,466
Gross Margin	444	137	295	541	1,417	1,687
Interest	03	04	--	--	07	01
Depreciation	122	124	123	136	505	466
Exceptional item	--	--	--	--	--	22
Profit Before Tax	319	09	172	405	905	1,198
Income Tax	96	04	53	159	312	348
Profit After Tax	223	05	119	246	593	850



## AVERAGE REALISATIONS

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Particulars	Q - 1-12-13	Q - 2-12-13	Q - 3-12-13	Q - 4-12-13	FY-12-13	FY-11-12
Alumina Export (US\$)	341	310	322	338	330	374
Metal Export (US\$)	2,191	2,102	2,210	2,281	2,191	2,434
Metal Domestic (Rs.)	123,135	128,431	129,244	128,014	127,164	120,301
Av. Exch. Rate (INR/US\$)	54.34	55.03	54.32	54.01	54.37	47.95





## Break up of Total Expenses

Rs. In Crore

Particulars	Jun'12	Sep'12	Dec'12	Mar'13	FY-12-13	FY-11-12
Raw Materials	316	291	264	296	1,168	1,031
Power & Fuel	605	753	585	489	2,432	2,197
Staff Expenses	283	296	290	285	1,154	1,035
Other Expenses	310	308	337	366	1,320	1,223*
Stock Adjustments	(70)	(38)	35	09	(64)	03
Depreciation	122	124	123	136	505	467
Interest	03	04	--	--	07	01
Total	1,569	1,738	1,634	1,581	6,522	5,957

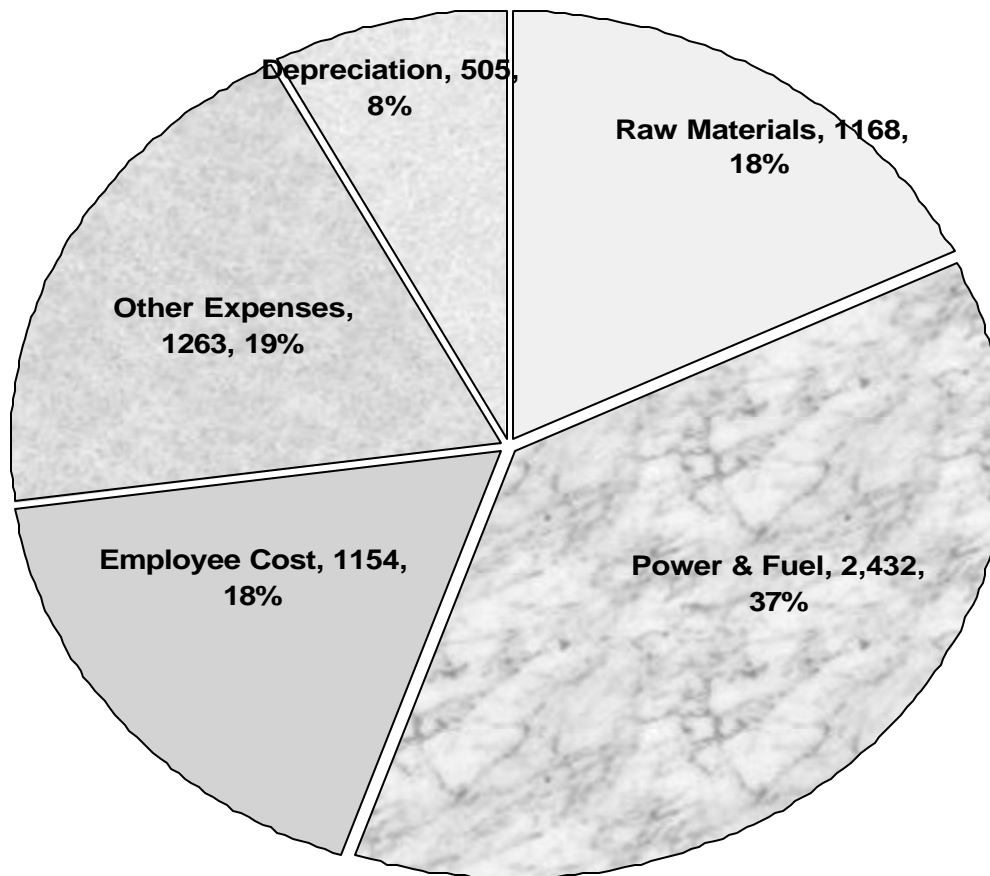
\* Includes Exceptional item (Expenditure) of Rs.22 Crore



## COST BREAK UP FINANCIAL YEAR – 2012-13

**Total Cost (Rs.6,522 crore)**

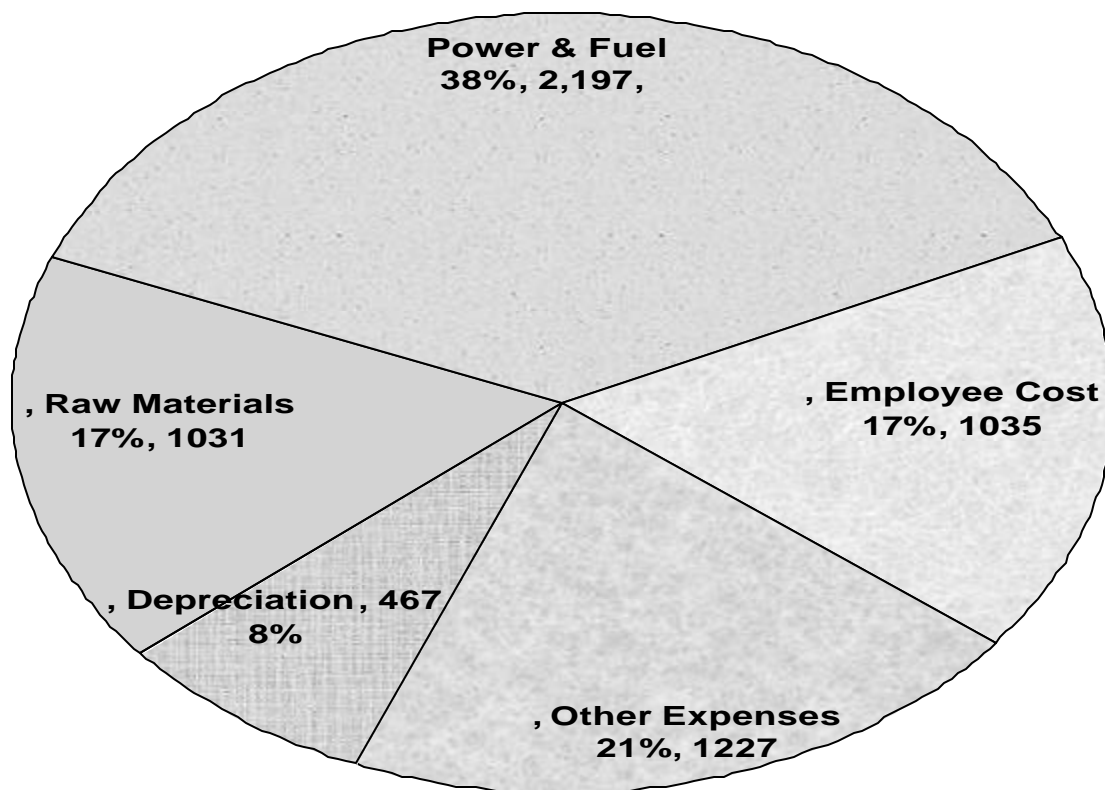
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## COST BREAK UP FINANCIAL YEAR 2011-12

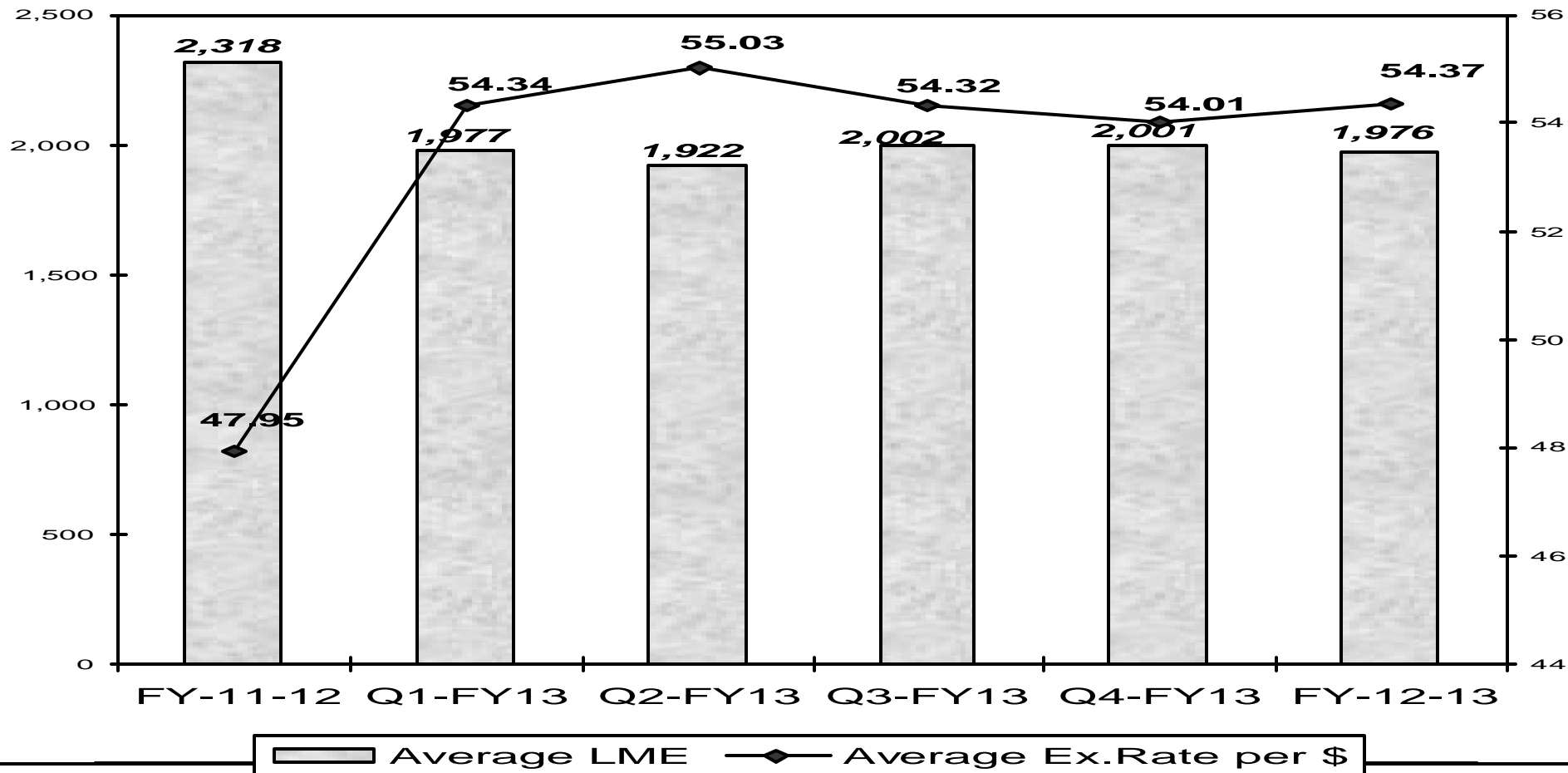
Total Cost (Rs.5,957 crore)



Other Expenses includes stock adjustments and interest



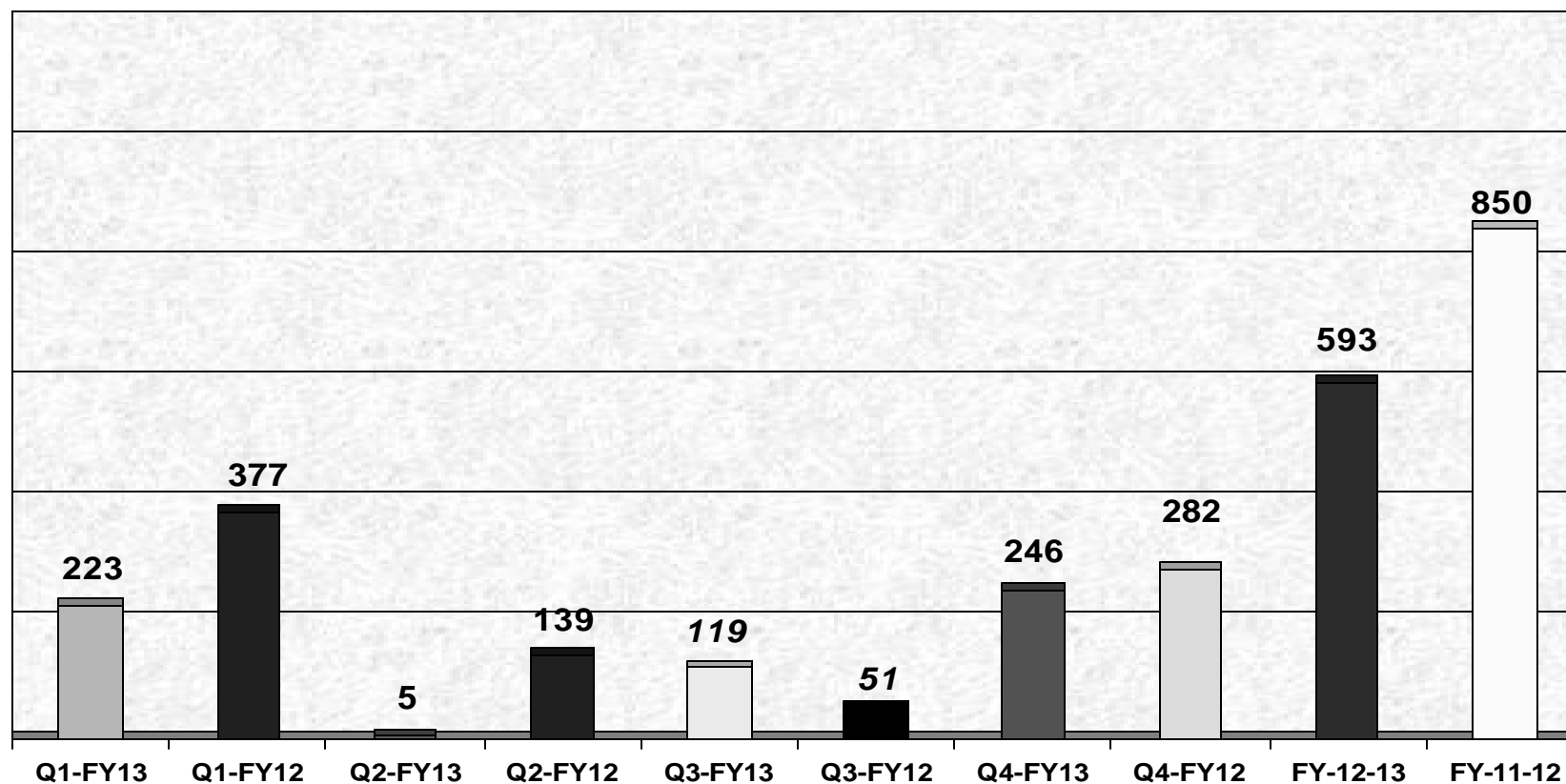
# MOVEMENT OF LME AND EXCHANGE RATE





# PROFIT AFTER TAX

Rs. in Crore

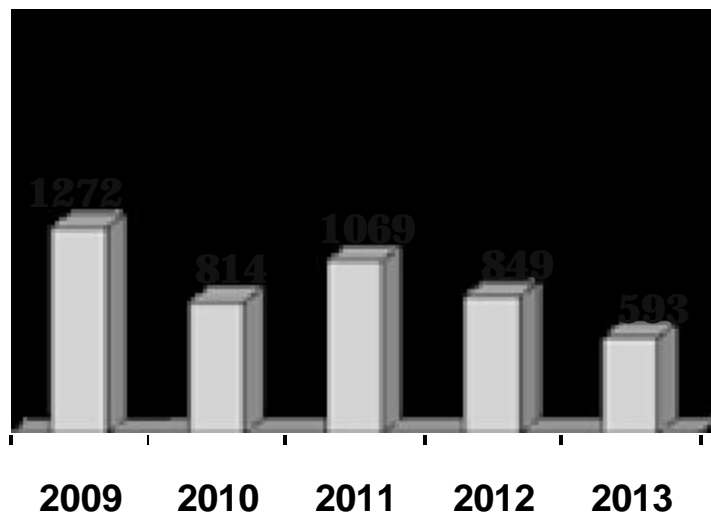
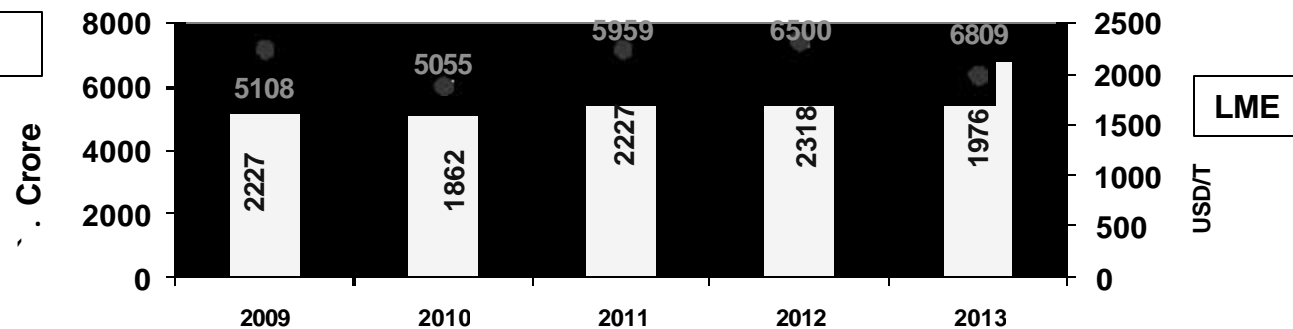




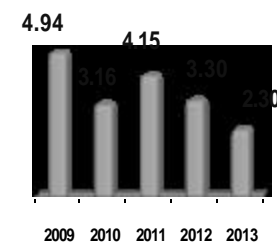
## FINANCIALS ( PREVIOUS FIVE YEARS)

Figures in ₹. Crore  
1 Crore=10 Million

Net Sales



EPS





## COMPARATIVE FINANCIAL PERFORMANCE HIGHLIGHTS

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(FY–2012-13 Vs FY-2011-12)

- ❖ Net sales up by Rs.309 crore (05%).
- ❖ Other income down by Rs.35 crore (5%).
- ❖ Total income up Rs.274 crore (04%).
- ❖ Operating cost up by Rs 544 crore (10%).
- ❖ Depreciation up by Rs.39 crore (08%).
- ❖ Profit after tax down by Rs.257 crore (30%).



## COMPARATIVE FINANCIAL PERFORMANCE HIGHLIGHTS

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(Q4 FY-13 vis-à-vis Q4 FY-12)

- ❖ Net sales is up by Rs.82 crore(05%)
- ❖ Other income down by Rs.40 crore(21%).
- ❖ Total income up by Rs.42crore (02%).
- ❖ Operating cost down by Rs.33 crore(02%).
- ❖ Depreciation up by Rs.13 crore(10%).
- ❖ Profit after tax down by Rs.36 crore(13%).





## COMPARATIVE FINANCIAL PERFORMANCE HIGHLIGHTS

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(Q4 FY-13 vis-à-vis Q3 FY-13)

- ❖ Net sales up by Rs.165 crore(10%)
- ❖ Other income up by Rs.16 crore(12%).
- ❖ Total income up by Rs.181 crore (10%).
- ❖ Operating cost down by Rs.65 crore(04%).
- ❖ Depreciation up by Rs.13 crore (11%)
- ❖ Profit after tax up by Rs.128 crore(108%).



## MAJOR FACTORS INFLUENCING RESULTS

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### **REVENUE :**

- Increase in average realization due to exchange rate
- Effective sales price is lower due to lower LME
- Increase in Alumina Volume
- Lower Metal sale

### ***COST :***

- Increase in Input Prices.
- Power purchase at Higher cost
- Use of coal from alternate source
- Higher other expenses on account of freight hike



## MATERIAL RATES (Unit Price)

Particulars	Unit	Financial Year		% Change
		2012-13	2011-12	
Caustic Soda	MT	29,646	25,613	16%
Lime	MT	6,971	6,197	12%
C.P. Coke	MT	25,170	26,778	- 06%
CT Pitch	MT	43,708	32,837	33%
Al. Fluoride	MT	95,821	75,314	27%
Fuel Oil - HFO (Ref)	KL	40,345	36,490	11%
Coal – (CPP)	MT	1,800	1,669	08%



# FINANCIAL RATIOS

RATIOS(ANNUALISED)		Financial Year	
		2012-13	2011-12
Gross Margin/Gross Block	%	10	12
Gross Profit to Capital Employed	%	09	11
Net Profit/ Net Worth	%	05	07
Net Profit/Net Sales	%	09	13
Return on Capital Employed	%	06	08
Earning Per Share	Rs	2.30	3.30
Book Value per Share	Rs	46.30	45.46



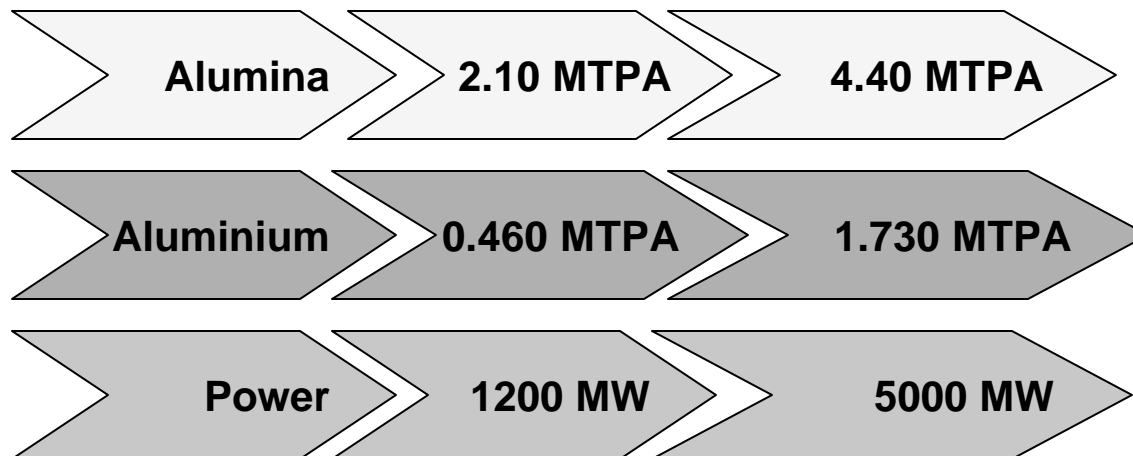
# **GROWTH INITIATIVES**



# VISION

**TO BE A REPUTED GLOBAL COMPANY IN THE  
METALS AND ENERGY SECTORS**

**PLAN BY 2020  
(ALUMINIUM AND BEYOND)**





# OPTIONS FOR GROWTH



BROWNFIELD EXPANSION

GREENFIELD GROWTH- INDIA & ABROAD

DIVERSIFICATION

UP & DOWNSTREAM INTEGRATION



# BROWNFIELD EXPANSION







# EXPANSION OF REFINERY

- ✱ 5<sup>TH</sup> Stream of 1 Million MT (Total Capacity – 3.3 Million MTPA)
- ✱ Investment – ₹ 4,570 Crore
- ✱ Bauxite need of Refinery Available
- ✱ Draft DPR is under scrutiny

## BAUXITE NEED OF REFINERY

MILLION TONNES

PERIOD	REFINERY CAPACITY	ANNUAL BAUXITE CONSUMPTION	TOTAL BAUXITE CONSUMPTION
FY14-16	2.3	6.8	20.40
FY17-FY36 (ADDITION OF 5 <sup>TH</sup> STREAM)	3.3	9.9	198.00
TOTAL			218.40



# BAUXITE RESERVES

FIGURES IN MILLION TONNES

MINE	2013 LEVEL	CUM
PANCHPATMALI	151	151
POTTANGI	65	216

MINE	STATUS	LIFE UPTO
PANCHPATMALI	OPERATING	2036
WITH POTTANGI	OPERATION FROM 2017	2036

**REQUIREMENT TILL YEAR 2036 - 218 MILLION TONNES**



# EXPANSION OF SMELTER & CPP

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## UPGRADATION OF SMLETER TO 220 KA AT ANGUL

### **SMELTER**

- Capacity Addition: 107,000 TPY
- Investment : Rs.900 Crore
- Up gradation to higher Amperage & other options being considered.

### **CPP**

- *Capacity Addition :  $2 \times 250 = 500$  MW*
- *Project Cost : Rs.2,700 Crore*
- *EIA/EMP study on hold till amperage decision on Smelter.*



# **GREENFIELD EXPANSION OPTIONS IN ALUMINIUM SECTOR**



# INVESTMENT- INDIA

	OPTIONS	PLANTS	INVESTMENT (IN ` . CRORE)
<b>A</b>	CAPTIVE COAL BLOCK-ODISHA	UTKAL E-COAL BLOCK- 2MTPA	338
<b>B</b>	REFINERY - Gujarat	Refinery Capacity – 1MTPA	4,065
<b>C</b>	SMELTER - Odisha	POWER – 1260 MW SMELTER – 0.5 MTPA	16,345
<b>D</b>	MINES & REFINERY- Andhra Pradesh	MINE – 4.20MTPA REFINERY – 1.4 MTPA	6,000



# UTKAL E-COAL BLOCK AT ODISHA

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- ❖ Environmental clearance received in Dec'2009
- ❖ Prior approval for mining lease received in Jun'2011 from MoC
- ❖ Disbursement of land compensation since April'2012
- ❖ Order placed for construction of R&R colony.
- ❖ Forest clearance and appointment of MDO in progress.
- ❖ EOI for fixing Mine Developer cum Operator is under preparation.
- ❖ Likely completion Dec'2014.



# Alumina Refinery at Gujarat

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- ❖ Project Office opened in Ahmadabad
- ❖ Representative sample study of bauxite has been over 80%.
- ❖ GMDC has proposed to hold 26% stake in equity of the project.
- ❖ Commitment on Bauxite, Jetty and power required for the project received from GMDC.
- ❖ DPR under preparation.



# Smelter and CPP in Odisha

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- ❖ State High Level Clearance Authority has approved the proposal.
- ❖ Re validated Pre Feasibility Report is under Examination
- ❖ Draft Site selection study and preliminary land survey report is under study.
- ❖ Application for allocation of coal block has been submitted to Ministry of Coal.





# OTHER PROJECTS BEING EXPLORED

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- **Caustic soda plant (2 lakh MTPA)**
  - DPR is under preparation by GACL(JV partner)
  - Estimated investment cost 600-800 crore
  
- **Aluminium Conductor Plant**
  - MOU signed with PGCIL to set up a JV
  - Draft Techno Economic Feasibility Report submitted by Consultant.
  - Site selection study carried out by consultant



# DIVERSIFICATION

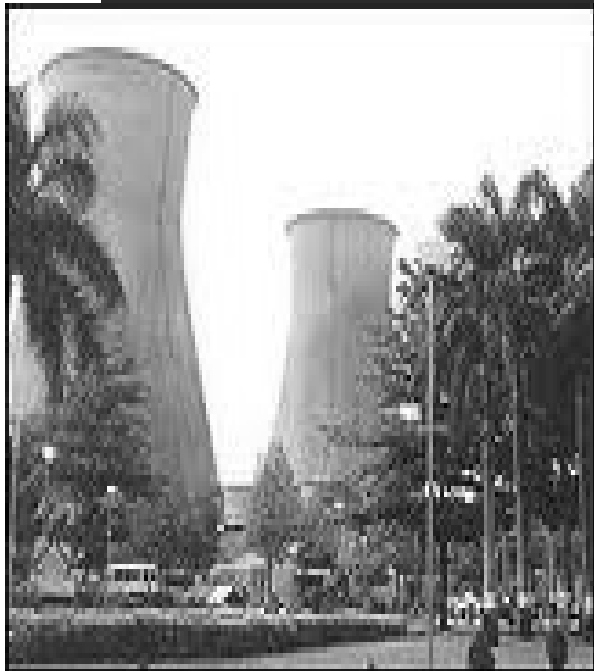
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**Nuclear Power Plant**

**RENEWABLE POWER PROJECTS**



# NUCLEAR POWER PLANT-JV WITH NPCIL



1400 MW NUCLEAR POWER PLANT -JV WITH NPCIL

ESTIMATED INVESTEMENT: ` **11,459 CRORE**

- **MOU SIGNED WITH NPCIL**
- **PROJECT IDENTIFIED (KAKRAPAR 3&4 UNIT)**
- **JV COMPANY FORMED**
- **COMMENCEMENT OF BUSINESS CERTIFICATE RECEIVED.**
- **CLEARANCE AWAITED FOR PARTICIPATION OF OTHER PSUs IN NUCLEAR PROJECTS.**

# RENEWABLE POWER PROJECTS

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## **Wind Power : 98 MW (2 Plants)**

- 1<sup>ST</sup> 50.40 MW plant commissioned at AP.
- Investment Rs.274 Crore.
- 2<sup>nd</sup> plant with capacity 47.60 MW plant under progress at Rajasthan
- Investment Rs.283 crore

## **Wind Power Plant At Damanjodi**

- **Proposal for 3<sup>rd</sup> Wind power Plant at Mined out area of Bauxite Mines at Damanjodi.**
- **Techno Economic Feasibility Report being reviewed**



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# Thank You