



Operational Review

Zinc-India

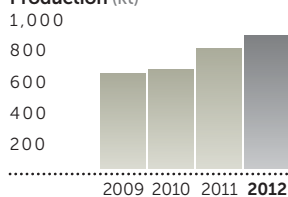
Key Achievements

- > Highest ever refined zinc and lead production of 759kt and 99kt, respectively
- > Record silver metal production of 7.8moz, up 35% over previous year
- > Maintained lowest quartile cost position
- > FY 2012 gross addition of 27mt to Reserves and Resources
- > Commissioned 100ktpa lead smelter at Dariba increasing total refined lead capacity to 185ktpa
- > 350 tonne per annum (tpa) silver refinery taking total silver refining capacity to 518tpa

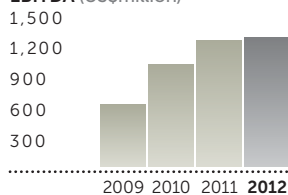
Strategic Priorities

- > Continue to focus on adding resources
- > Achieving 1mt capacity operations
- > Realising full potential of SK Mine and silver production capability
- > Rampura Agucha underground mine development

Production (kt)



EBITDA (US\$million)



Operations India



- 1 Debari smelter
- 2 Chanderiya smelters
- 3 Rampura-Agucha mine
- 4 Rajpura Dariba mine and smelter
- 5 Sindesar Khurd mine and Zawar mine

Map not to scale

Market Overview

Zinc

Strong demand created by growth from emerging economies more than offset weaker demand from developed economies, leading to global zinc demand growth of 4% in 2011 reaching 12.5mt. Growth focused on near-term demand is at a similar level of 4–5% on the back of strong demand from emerging economies. It is predicted that shortly the net surplus position may turn into a net deficit position. Closure of several mines at the end of their mine life may significantly impact the supply/demand equation. It is predicted that this could happen in 2014–15.

India, the home market for our Zinc-India operations, continues to demonstrate healthy growth in zinc consumption largely driven by consumption in galvanising/construction sector/infrastructure sector. The near-term demand growth focus in India remains at a robust level of 6–7% per annum with the potential to reach much higher levels considering India's quite low per capita consumption of zinc.

Main image: 2 units of Turbine and Generator at Chanderiya CPP, HZL

Lead

Driven by demand essentially arising from emerging economies, global lead consumption in 2011 increased by 4% to around 9.8mt whereas the total refined lead supply for the calendar year 2011 was 9.9mt, a modest surplus.

We expect strong growth in lead consumption to continue as demand for automation, power back-up and the other applications are expected to be strong, particularly in the emerging economies. The market is expected to be in balance in 2012.

In 2011–12, Indian lead consumption registered a growth of 11%, essentially driven by strong growth in the automation sector.

Silver

India is the fourth largest consumption centre for silver. In 2012, the demand for silver globally is expected to increase by 4%, driven by growth in consumption in fabrication, industrial applications, coins and as an investment asset. It is estimated that demand for silver in India will grow by 3–4% in FY12.

Operations

Refined zinc production for the year was a record 759kt, an increase of 6.6% over the previous year's production of 712kt. The production increase was primarily due to higher utilisation of new-generation smelters in Rajasthan despite the ramp down of the high cost Vizag smelter in Q4. Refined lead production volume improved by 57% during the year due to volume contribution from the newly commissioned 100kt Dariba lead smelter.

Silver production also registered record growth of 35% to 7.8moz, compared with 5.8moz during FY 2010–11. This increase was mainly attributable to higher production from the Sindesar Khurd ('SK') mines and a 1.4moz contribution from the new 350tpa silver refinery commissioned during the year.

Review of Performance – India

(In US\$ millions, except as stated)

	FY 2011–12	FY 2010–11	% change
Production – zinc (kt)			
Mined metal content	739	752	(1.7)%
Refined metal	759	712	6.6%
Production – lead (kt)			
Mined metal content	92	88	4.5%
Refined metal ¹	99	63	57.1%
Production – silver (moz) ²	7.78	5.76	35.1%
Average LME zinc cash settlement prices (US\$ per tonne)	2,098	2,185	(4.0)%
Average LME lead cash settlement prices (US\$ per tonne)	2,269	2,244	1.1%
Average exchange rate (INR per US\$ per tonne)	47.9	45.6	5.0%
Unit costs			
Zinc (US\$ per tonne)	1,010	990	2.0%
Zinc (other than royalty) (US\$ per tonne)	834	808	3.2%
Revenue	2,316.1	2,159.9	7.2%
EBITDA	1,244.8	1,219.6	2.1%
EBITDA margin	53.7%	56.5%	-
Operating profit	1,126.6	1,117.2	0.8%

1 Including captive consumption 7kt v/s 6kt in FY 2011–12 v/s FY 2010–11.

2 Including captive consumption 1,123 thousand ounces v/s 997 thousand ounces in FY 2011–12 v/s FY 2010–11.

The unit cost of zinc production during FY 2011–12 increased marginally by 2% to US\$1,010 per tonne as against US\$990 per tonne incurred in FY 2010–11. This change in cost was primarily due to interplay of several factors – on the positive side, improved efficiency in smelting operations, INR depreciation, improved by-product realisation and on the negative side, higher coal prices, lower ore grade during the year and higher mine development expenses as per the mining plan.

EBITDA for FY 2011–12 increased to US\$1,245 million, as compared to US\$1,220 during FY 2010–11. Increased production volumes and improved operational efficiencies contributed to this increase.

Projects

During the year, we commissioned the Dariba lead smelter and a 350mt silver refinery, both of which are performing well. Sindesar Khurd mine achieved a 1.8mtpa run-rate towards the end of Q4 FY 2012. The progress of underground mine development work at the Rampura Agucha mine and the green field Kayar mine is as planned.

With the commissioning of the 150MW of our wind power generation capacity in FY 2011–12, we have now reached a total of 274MW, making us one of the largest wind power producers in India.



Operational Review continued

Zinc-India

Innovative techniques stabilise waste dump at Rampura Agucha mine



Managing the waste dumps produced by the world's biggest zinc mine in the hot, dry climate of Rajasthan India, presented a considerable challenge. Dust blowing in the wind, soil erosion and an unsightly barren environment were all problems faced at the Rampura Agucha mine, operated by HZL.

As part of an innovative initiative, 12,000 square metres of waste dump was levelled and covered with geo-textiles to stabilise the slopes. The soil was then conditioned and planted with Vetiver grass seedlings. During the rains, around one ton of seeds were sprayed on the stabilised slopes and along the periphery of the mine. With regular watering and a protective soil cover, the slopes are now coming to life, bringing greenery to this industrial landscape and reducing the environmental impact of mining operations.



Exploration

We continue to meet success in our exploration activities and during the year we added 27.1 million tonnes to our Reserves and Resources ('R&R'), prior to depletion of 8.04 million tonnes. With a total Reserves and Resources of 332.3 million tonnes containing 35 million tonnes of zinc lead and 912 million ounces of silver as on 31 March 2012, we continue to maintain our prominent position with over 25 years of remaining mine life.

In line with the Company's growth vision, we continue to invest our resources in identifying new world-class resources. A total of 94,250 m of drilling was completed at various exploration sites in FY 2011-12. During the year, we performed systematic green field exploration over 4,500 sq km and applied for new Reconnaissance Permits for around 18,700 sq km.

Outlook

In line with the mine plan, mined metal production in FY 2012-13 is expected to be slightly higher than this financial year. Production in the first half of FY 2012-13 is expected to be marginally lower than that last year, but will be more than made up in the second half of FY 2012-13. The SK mine is expected to deliver volumes near its capacity of 2.0mtpa in FY 2012-13. Total integrated silver production is projected to be around 350 tonnes in FY 2012-13.

The average cost of production for FY 2012-13 is expected to be in line with this year however there could be quarterly variations in line with the mine plan.

Above right: Engineer inspecting cathodes at cell house of Chanderiya Hydro smelter, HZL.

Above left: Slope Monitoring Radar at Rampura Agucha Mine, HZL.

Zinc-International

Operations Africa

- 1 Skorpion mine, Namibia
- 2 Black Mountain mine, South Africa

Operations Ireland

- 1 Lisheen mine

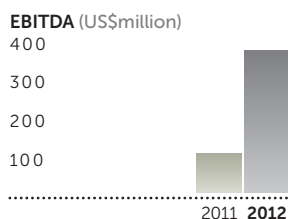
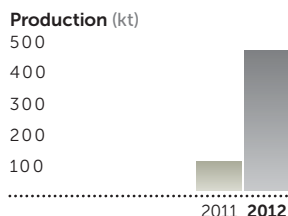
Maps not to scale

Key Achievements

- > Integration successfully completed
- > Stable operating performance, higher volume over previous period
- > Mine life extended at all three locations

Strategic Priorities

- > Feasibility of Gamsberg project in South Africa
- > Work on other satellite opportunities at all locations
- > Increase in mine life through extensive exploration programme



Note: 2011 numbers are for the period post acquisition

Review of Performance – International

(In US\$ millions, except as stated)

	FY 2011–12	FY 2010–11
Production – zinc (kt)		
Mined metal content BMM and Lisheen	215	30
Refined metal Skorpion	145	50
Production – lead (kt)		
Mined metal content	84	14
Average LME zinc cash settlement prices (US\$ per tonne)	2,098	2,185
Average LME lead cash settlement prices (US\$ per tonne)	2,269	2,244
Zinc (US\$ per tonne) C1 cost (cents per lb):	52.9	50.7
Revenue	890.7	218.9
EBITDA	366.0	101.3
EBITDA margin	41.1%	46.3%
Operating profit	129.2	47.2

Operations

The increase in production level is the highlight of the first complete year of operations post the acquisition of these assets during FY 2010–11. Total production of zinc and lead metal-in-concentrate and zinc metal was 444kt, comprising 299kt of zinc and lead metal-in-concentrate at Lisheen and BMM and 145kt of refined zinc at Skorpion. This compared well with last year's production of 434kt.

The unit cost of production in FY 2011–12 rose by 4% to 52.9 US cents/lb compared with 50.7 US cents/lb in FY 2010–11, primarily due to higher energy costs and lower by-product credit.

EBITDA for the FY 2011–12 was US\$366.0 million and operating profit was US\$129.2 million. The lower operating profit is due to higher amortisation of mine properties charges of US\$117.8 million based on the existing mine life in addition to depreciation charges of US\$119.0 million.

Prior year performance is not comparable as the acquisition was completed over the period from December 2010 to February 2011.

Exploration

We have extended the life at all three of our mines during the year. Mine life increased to 2017 at Skorpion with some additional work to be done to convert resources to reserves. Gross addition of more than 2mt to Reserves and Resources was made at Black Mountain mine, extending the mine life. Similarly, Lisheen mine life was extended by one year to approximately three years now.

A feasibility study is under way as the first step towards the development of the Gamsberg project. The Gamsberg project contains the largest undeveloped zinc deposit in the world. With an estimated 186mt deposit, this discovery has the potential to deliver over 400ktpa over a mine life of more than 20 years.

Outlook

In FY 2012–13, production at Zinc-International is expected to be impacted by a fall in grades, which will lead to lower production by about 5–7%. Success in enhancing resource position and ongoing exploration work has significantly enhanced the value of the assets as compared with the data available at the time of acquisition.