Proceedings of the International Seminar on Mineral Processing Technology - 2006, Chennai, India. pp. 50.

Vedanta: Journey Towards Mettle for Metal

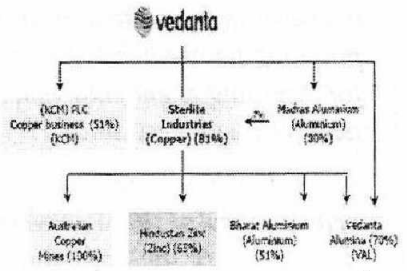
Kuldip Kaura

Vedanta Group, India

BACK GROUND AND OVERVIEW

Vedanta Resources plc was listed in London in December 2003. Vedanta is a diversified and integrated FTSE 250 metals and mining group with annual sales of $1.9 bn. Vedanta principal operations are located in India, where Vedanta has a major market share in each of our main metals: Aluminum, Copper, Zinc and Lead. This is due to the underlying opportunities prevailing in India and its move towards Fast Emerging Resource Destination. Vedanta has a strong track record in managing operations and improving costs and output. Vedanta's Indian zinc and copper operations rank in the top quartile of global cost efficiency. In addition to the existing operations, Vedanta has an exceptional range of expansion projects across each of metals. This will see investment spending of over $2bn, which is already more than half completed.

COPPER BUSINESS



Vedanta has two copper businesses, the first based in India and the second at Konkola Copper Mines in Zambia, which was acquired in November 2004. There is some captive copper mining (2 copper mines in Australia), but the business is principally in smelting and refining. Sterlite produces finished copper in the form of cathode, some of which is then converted to copper rod. The initial process is carried out at the smelter, based at Tuticorin in Southern India, and there are refineries and copper rod plants at Tuticorin and Silvassa, in Western India. The smelter is based on a proven energy efficient and environment friendly technology, viz. ISASMELT PROCESS from MIM, Australia, world leaders in copper smelting technology. In May 2005, a new 300,000 tpa smelter was commissioned. This replaced the previous smelter, which had capacity of 180,000 tpa. In 2004 the company had a domestic market share of some 40% of copper sales. Around 70% of the copper cathode is converted to rod and some 50% of total copper output is exported. The business has a strong track record at increasing production and reducing unit costs. KCM is an integrated operation in Zambia, comprising underground and open pit mines, a leaching plant and smelting and refining facilities. The capacity is around 250,000 tpa.

ALUMINIUM BUSINESS

The aluminium division of Vedanta is divided between two companies, MALCO and BALCO. BALCO is based in Central India with a capacity of 100,000 tpa and MALCO is in the South with a capacity of 35,000. Both are integrated operations, with their own bauxite mines which is converted to alumina and then on to aluminium. There are facilities to produce rolled sheets and other value-added products. The Smelter and Refineries are based on a proven technology, viz. Soderberg Technology and Bayer Technology respectively. There is a substantial expansion taking place at BALCO which will increase Vedanta's total aluminium output to 400,000 tpa. Vedanta is the 3rd largest supplier of aluminium in India, with a market share of around 20%. Electrical transmission, consumer durables and transportation dominate demand for aluminium in India. Recent growth has been over 10% per annum and consumption of aluminium in India remains low by international standards.

ZINC BUSINESS

The Zinc business of Vedanta is managed within Hindustan Zinc Limited. HZL is India's only integrated zinc company, operating from mine to finished metal and supplies around 75% of India's zinc requirements. At the base of the company is the Rampura Agucha mine – which produces some 210,000 tpa of zinc. Expansion has taken place to increase output from the Rampura Agucha mine along with larger facilities at the nearby Chanderiya smelter. This will take total production to some 400,000 tpa. Exploration work is taking place around the mine, following the successful drilling in the year March 2005. The ore produced at the mines contains lead, which is smelted alongside the zinc. Last year the company produced around 35,000 tonnes of lead. **Hindustan Zinc Ltd. (HZL)** operates smelters based on Pyrometallurgical (Chanderiya Lead Zinc Smelter) and hydro-metallurgical (Debari and Vizag Zinc Smelters) process routes. The Chanderiya Lead Zinc Smelter is one of the most cost-efficient pyrometallurgical Zinc smelters in the world. This is being expanded to 85,000 tonnes, due for commissioning by March 2006. Zinc is used mainly in galvanizing steel to improve its durability. HZL plays a role in developing the market for the end product. The capacity for galvanized steel in India is increasing significantly, due to the demand for the product in infrastructure and construction work.

VEDANTA VISION – DELIVERY & GROWTH

Vedanta Resources plc has coined its key strategies towards Building a World Class Metals & Mining Group generating strong financial returns.There has been continuos growth & results delivered by Vedanta Resources plc, right away after its listing in London Stock Exchange with established track records of exceeding ambitious targets and a plan ahead for further investment spending of over $2.3bn.

Though, Risks and Rewards are part and parcel of Non – Ferrous commodity business, Vedanta, born to Win all challenges in the Non – Ferrous metal Kingdom with its own visions and operational DNA.