

# Investments in India continue

While major aluminium producers in India have had much to contend with along with other industries in the nation during the Covid-19 pandemic, the strong long-term potential for aluminium demand growth in the country is continuing to drive their investments, writes Kunal Bose

Vedanta Group chairman Anil Agarwal often reminds New Delhi that “value creation by public sector undertakings (PSUs) will be up by anything up to four times if the government will care to bring down its ownership to 30%, heralding management change. I’m recommending only this since total exit from PSUs, however desirable that may be, will inevitably be encountering political and trade union resistance.”

Agarwal is particularly well placed to make this recommendation since, following Vedanta’s acquisition of 51% of Bharat Aluminium Company (Balco) in 2001, the company has seen large growth in smelting capacity to 590,000 tonnes, expansion of its value-added products (VAPs) portfolio, and a rise in coal-fired electricity generation capacity to 2,010 MW. Not only at Balco at Korba in Chhattisgarh, but also at Rajasthan-based Hindustan Zinc Limited, much value was unlocked following Vedanta acquiring 64.92% of the company in three phases. Under Vedanta management, HZL has become the world’s fourth largest zinc-lead smelter.

## Plenty of potential

Within India’s extensive aluminium industry, the government-owned National Aluminium Company Limited (Nalco) has the country’s richest ownership of bauxite and thermal coal deposits and a robust infrastructure that includes a 14.6 km long cable belt conveyor that allows very cost-effective transfer of bauxite from the hills of Panchpatmali in Orissa’s Koraput district to the alumina refinery at Damanjodi valley.

An official of the Confederation of Indian Industry noted that, “Emboldened by local aluminium demand growth prospects and

also the country’s potential to become a significant supplier of the white metal in the world market,” large investments to expand primary metal capacity, as well as in bauxite mining and alumina refining capacity upstream and a portfolio of VAPs downstream, are attractive to the nation’s primary aluminium producers. Hindalco and Vedanta Group are now pursuing some major new projects as they have reinforcing long-term raw-materials security as a focus. “On the other hand, being a government undertaking, Nalco has automatic ownership of enviably rich bauxite and coal resources, which get expanded at intervals,” the official added.

At the same time, Balco chief executive officer Abhijit Pati said: “Given progressive reforms in mining laws that among other things recognize the importance of exploration with participation of foreign groups armed with sophisticated technologies not locally available and India’s plentiful deposits of bauxite and thermal coal, aluminium makers should be assured of seamless long-term supplies of raw materials from owned mines and external sources.”

According to the Indian Bureau of Mines, the country’s bauxite resources are an estimated 3.896 billion tonnes, including reserves of 656 million tonnes. The challenge is to “speed up the conversion of resources into reserves at an accelerated rate and also put new deposit blocks on auction, considering that the Indian aluminium industry will be required to step up alumina refining and smelting capacity at a rapid pace to meet domestic aluminium demand set to grow at close to double-digit rate and also seize export opportunities,” said Pati.

Prime minister Narendra Modi’s ambition is to make India the world’s third largest economy at a size of \$10 trillion. “In that journey, India’s per capita aluminium use will performe grow rapidly from the current low of 2.5 kg to the global average of 11 kg. That will require an additional aluminium consumption of 16 million tonnes, making India the second largest user of the metal next to China. Aluminium growth potential here is huge,” said Pati.

Confirming Agarwal’s faith in the growing Indian application of aluminium in building and construction, automobile, packaging, aerospace and defense sectors, Vedanta has announced major investment plans to raise capacity of the Lanjigarh refinery from 2 million tonnes to 5 million tonnes, which will make it one of the world’s largest single-location refinery complexes, make Balco a nearly 1 million tpy smelter over the next “18 to 24 months” by commissioning new capacity of 414,000 tonnes, and also set up a new carbon complex at Jharsuguda, where the Group owns a 1.6 million tpy smelter and a 3,615 MW power complex. Expansion of the Lanjigarh refinery is essential since it feeds alumina to both Jharsuguda and Balco smelters. Along with smelting capacity expansion, Balco’s VAPs portfolio will be using 92% of primary aluminium output.

Vedanta Group CEO Sunil Duggal said: “Balco’s expansion is a very important project for us... Post this expansion, the Group’s aluminium smelting capacity will rise to 2.8 million tonnes.” He also said, parallel to building new capacity, the Group will be focused on “reducing aluminium production cost by nearly \$300 a tonne to around \$1,200 a tonne in the next two years (from \$1,526 a tonne in the first quarter

(April to June) of 2021-22). That will significantly improve profitability of our aluminium business.”

Compared with Hindalco and Nalco, which get bauxite from their own mines, Vedanta, in the absence of ownership of big bauxite deposits, is a buyer of both bauxite and alumina from the market. “While this has an impact on production cost of the metal, we are constantly working at overcoming the disadvantage by improving smelter efficiency and reducing power use,” said Pati. At the same time, Vedanta will be an aggressive bidder when the government puts new bauxite deposits on auction.

### Investment downstream

In the meantime, as the aluminium extrusion market in India is expected to grow dramatically from around 375,000 tonnes to about 850,000 tonnes by 2030, on the back of strong demand growth, particularly in building & construction and automobile sectors, Hindalco is building a 34,000 tonne greenfield extrusion plant at Silvassa at an investment of Rs7.3 billion. The fully automated plant with three extrusion presses will enable the company to meet requirements of “premium customers” in the country’s southern and western regions, which account for 60% of the Indian extrusion market. The new Silvassa plant is part of Hindalco’s plan to create more assets downstream. Hindalco managing director Satish Pai said: “Over the next few years, as part of our downstream strategy, we intend to enhance our VAPs capacity from over 300,000 tonnes to over 600,000 tonnes with investments of around Rs70 billion. The focus on downstream assets is part of our sustainable business model to further de-risk business from LME volatility.”

Hindalco already has an extrusion plant each at Renukoot in Uttar Pradesh and Alupuram in Kerala. But the new Silvassa factory will allow Hindalco to make more sophisticated extruded products, leading to import substitution. In the meantime, Hindalco’s joint venture with Almex of the United States, which is a leader in aluminium cast-house process technology, has over the years become the country’s largest supplier of aerospace and defense-grade aluminium hard alloys.

An industry official said, “having built smelting capacity of 1.3 million tonnes at four sites, Hindalco, the industry leader in VAPs, sees many opportunities in expanding downstream capacity, including alloys for use in defense, aerospace and automobile sectors. In fact, Hindalco’s success in de-risking business by expanding

downstream operations and the country’s growing demand for aluminium VAPs have encouraged Vedanta and Nalco to now pursue the same strategy.”

Hindalco said that its “future medium-term growth” will be linked to investments in downstream business. It further said that as flat rolled products (FRPs) and extrusions will find increasing uses in building & construction, transportation and packaging, investment in primary aluminium downstream will allow the company to benefit from evolving market opportunities.

Novelis, the major producer of flat rolled products and an important scrap recycler is a wholly owned subsidiary of Hindalco. With recycling capacity of 2.5 million tonnes, the share of recycled aluminium content in Novelis production in 2020-21 was 61%. Use of recycled metal by Novelis is rising every year. Novelis itself completed the acquisition of Aleris in April 2020, further reinforcing Group strength in aluminium VAPs. The purchase of Aleris allows diversification into some premium value-added market segments, particularly aerospace and automobile. Its own significant investment in R&D and access to technologies available with Novelis and Aleris will prove useful as Hindalco is set on expanding its VAPs base, note industry observers.

### Plenty of projects

A similarity shared by Vedanta Group and Hindalco is their ability to complete projects on time and without cost escalation. The integrated aluminium producer Hindalco will soon be completing a 500,000 tonne expansion of the 1.5 million tonne alumina refinery in Orissa’s Rayagada district. The refinery, which has the benefit of sourcing “very high-quality bauxite” from mines in Orissa’s Baphimali hills and highly integrated logistics between mines and the plant, finds a place among the world’s lowest cost producers of alumina.

Nalco is also a cost-effective alumina producer, but institutional and public shareholders note the long time it can take the 51.5% government-owned and managed company to execute projects. They also note that, being a PSU, it has the benefit of being able to secure government clearances more easily than its private sector peers.

While Hindalco and Vedanta have raced ahead with building new capacity at regular intervals, Nalco is making slower progress in giving shape to the proposed 600,000 tonne smelter in Orissa’s Angul, where it runs a 460,000 tonne smelter. The project

has been under discussion for many years. The company has also been steadily expanding alumina capacity at Damanjodi, where it operates a 2.275 million tonne refinery.

In another initiative, Nalco has decided to build a 60,000 tonne high-end aluminium alloy plant and also several other downstream projects, including a 50,000 tonne extrusion unit, a 90,000 tonne foil factory, a 30,000 tonne rolled product facility and an alloy wheels plant with annual capacity of 600,000 units. As is the experience of Hindalco, in value addition to primary metal on a large scale, Vedanta’s aluminium business and Nalco’s will have the benefit of earning much higher Ebitda than primary metal and also derisking their operations from LME aluminium price swings.

### Aluminium parks

In addition to their major value addition programmes, Vedanta and Nalco are to build aluminium parks adjacent to their smelters, where small and medium enterprises will make a wide range of VAPs and alloys by using molten metal to be supplied by the two groups. Moreover, since Orissa is an electricity-surplus state, Vedanta has asked the state government to supply power to the units in the park at “competitive rates. This way a portion of the state’s surplus power will get used locally. At the same time, production cost of units in the park will stay low.” Vedanta has made a commitment to supply 3 million tonnes of molten metal a year from its smelter at Jharsuguda.

Nalco is creating a 223 acre park in a joint venture with a state government agency. The Orissa government is giving support to aluminium park ventures for their huge employment potential in regions where economically disadvantaged Adivasis (the original inhabitants of the Indian subcontinent) live in large numbers.

In the meantime, during April to June, helped by high LME prices, easing of logistics allowing more metal production and demand improvement, all of the major Indian aluminium producers earned record Ebitda. Production at Vedanta in 2021-22 first quarter was 17% up year-on-year to 549,000 tonnes. In the same time comparison, Hindalco produced 319,000 tonnes against 291,000 tonnes, and Nalco produced 114,000 tonnes compared with 98,000 tonnes. The fall in Covid cases and the gradual easing of restrictions should lead to further improvement in the working of aluminium industry through rest of the year, said Pati.