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INTERVIEW



WOMEN IN WELDING





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“The Indian aluminium demand is growing at a CAGR of ~10%, on a mid-term basis. In the next 10 years, the demand is anticipated to increase to over 12 million tons, faster than the current 6-7% GDP growth rate.”

Q1. Vedanta Ltd is a globally diversified natural resources company with interests in zinc-lead-silver, Iron ore, Steel, Copper, Aluminium, Power, Oil and Gas. How has been the journey so far? What keeps you committed towards a mission “To create a leading global natural resource company”?

The journey of Vedanta Group has been phenomenal if you look at how new the company is as compared to its

domestic and global peers. Built with a simple vision by the Group Chairman, Mr. Anil Agarwal – “to create a leading global natural resource company”, today Vedanta Limited is the world’s 6th largest diversified natural resources conglomerate with business operations in India, South Africa, Namibia, UAE and Australia. It is a leading producer of Aluminium & Power, Oil & Gas, Zinc, Lead, Silver, Copper, Iron Ore, Steel etc.

in India. It indirectly contributes ~1% towards India’s GDP as per IFC (Institute for Competitiveness). Vedanta’s ever-expanding portfolio follows a history of technological advancements and sustainable development, backed by world-class standards of corporate governance, safety, sustainability and social responsibility.

Vedanta’s Aluminium & Power Business is India’s largest producer

of aluminium – the metal of strategic importance for India's economy and essential commodity for various other sectors/SMEs due to its critical role in diversified applications. Vedanta has strategically located large-scale assets in Chhattisgarh and Odisha with integrated captive power plants and is also one of the largest private sector captive power generators in India. Our state-of-the-art aluminium smelters at Jharsuguda (Odisha) and BALCO (Korba, Chhattisgarh) have a combined installed capacity of ~2.2MTPA. The aluminium business clocked just over 1.9 million tonnes of production in FY20. Our Jharsuguda smelter is also India's first, and only, aluminium smelter to be a part of the global 1 MTPA+ production club.

We also operate a world-class 2 MTPA capacity alumina refinery at Lanjigarh in Odisha, producing metallurgical grade alumina which is the primary raw material for the company's aluminium smelters. Our power business includes the super-critical Talwandi Sabo Power Limited (TSPL) at Mansa (Punjab), a

wholly-owned subsidiary of Vedanta Ltd.

Q2. Vedanta aims to become a low-cost producer of aluminium, and this will be a game changer for the Indian economy. Can you explain in what ways?

Today, India's per capita consumption of aluminium at ~2.8 kg in sharp contrast to the global average of 11 kgs, while China's per capita consumption is over 25 kg. Owing to its versatility and superior properties, aluminium has become the metal of choice for transportation, power, aerospace, defence, building and construction and packaging industry – all of which are among the key focus sectors of Make in India. Aluminium is a strategic metal for important government initiatives like Smart Cities, Power for All and indigenous space programs. This is where our mission to become the lowest-cost producer of aluminium can bring about a breakthrough in the domestic aluminium industry. Our Chairman, Mr. Anil Agarwal's vision for Vedanta to produce resources critical to improving the country's self-reliance in all possible sectors pegs

immense responsibility on us to take our responsibilities as nation builders seriously.

Vedanta becoming the lowest cost producer of primary aluminium offers leverage to critical domestic industries – building & construction, electrification, aviation, defence, automobiles, etc. – to create self-sufficiency to cater domestic aluminium demand and eliminate any import dependency and thereby be comparatively more resilient to the vagaries of global trade/economic fluctuations.

The important thing here, however, is the fact that although these sectors have a huge potential to consume aluminium, as a country we are yet to explore the various applications of aluminium that can cater to these sectors. There are four things that are required to leverage the potential of the domestic aluminium industry: First, preferential market access and preference for indigenous aluminium usage in all Government projects should be a priority area. Second, focus should be given to building domestic capability for critical application development for the critical sectors



under "Make In India". Third, the importance of aluminium industry should be acknowledged in line with other countries and be recognised as core sector with a National Aluminium Policy that will encourage, protect and boost the domestic aluminium industry. And finally, the domestic industry needs to be encouraged through support measures to become cost competitive vis-a-vis global players. The Aluminium industry has been included as strategic sector in the industrial strategy/plan of several industrialized economies and has also been given support to enhance competitiveness of their domestic industry.

Q3. Being one among the largest producers of aluminium in the country, what is your say on the current aluminium market of India?

Globally, the aluminum consumption is driven majorly by China and India. The Indian aluminium demand is growing at a CAGR of ~10%, on a mid-term basis.

In the next 10 years, the demand is anticipated to increase to over 12 million tons, faster than the current 6-7% GDP growth rate, owing to growing urbanization, infrastructure and growing automotive, aviation and power sectors. To meet this demand, India requires an additional capacity of 8 million tons, with 4 lakh crore investment. The domestic production needs to grow to create self-sufficiency for catering to increasing demand, and the country should not be dependent on imports. Meeting the growing demand through imports may result in forex outgo of ~\$20 bn in the near future. With almost the same population as China's, the Per Capita Consumption (PCC) of aluminium in India is barely a tenth of China's.

The aluminium industry in India is struggling with increasing imports. Despite having sufficient capacity to cater to the domestic demand, 60% of domestic consumption is met through imports, out of which 60% is scrap, resulting in a forex outgo of US\$ 5.5

billion (Rs 38,000 Crore). With recent global developments and protectionist measures adopted by the US and China, India has become a dumping ground for aluminium. While Aluminium consumption growth was stagnant in FY-20, the share of imports has increased resulting declined domestic sales by 6%. Aluminium scrap constitutes 60% of total imports, and 70% scrap is used in automotive sector. But even with the slump in Indian automotive sector, scrap imports have remained at the same level for between April'19-Jan'20, as compared to the previous year (1036 KT v/s 1035KT), which is a point of great concern. There is a huge potential threat of surge in imports from China, which despite slump in consumption has not curtailed its production and is building huge inventories. China is the only country on course of recovery and will start aggressively pushing its inventory at cheap prices once the situation improves, with India as the main target for dumping.





Amidst global meltdown of commodities, the aluminium LME prices have crashed by ~40% (by ~\$870/MT) to an all-time low since 2009 at US\$ 1421/MT level in Apr, 2020, from as high as US\$ 2290/ MT in May'18, resulting in huge cash losses for primary Aluminium producers. On the other hand, the Indian aluminium industry is struggling with increasing costs due to a huge burden of unrebated central & state taxes and duties, constituting ~15% of aluminium production cost which is amongst the highest in the world.

Q4. Recently, the company has bagged the most coveted Energy Efficient Unit Award 2019 from Confederation of Indian Industry (CII). Congratulations. Please brief us on the same.

Thank you. As aluminium production is an energy intensive operation, we strive to be as energy efficient as possible across all areas of operation. We were the first aluminium smelting organization in Asia and the second in the world to get the coveted Energy Management Certification. Innovation and excellence are two key pillars of our business and energy is one of the core focus areas for innovation. We have recently collaborated with GE for deploying India's first Digital Smelter Solutions. This will further reduce

specific power consumption, improve raw material utilization and enhance current efficiency thus creating best-in-class performance. At the same time, we also ensure adequate sensitization of employees towards optimizing their personal and departmental energy usage by encouraging energy conservation, cutting down on wastages and leakages. We are also evaluating adding renewable power into our portfolio. Our energy efficiency drives have garnered national and international accolades and we intend to keep up this streak and set benchmarks for the industry as the world's most energy efficient aluminium smelter.

Q5. Elaborate on how a wide gamut of aluminium value-added products can create a sustainable impact on core industries like Automobile, Infrastructure, Construction, Power, etc.

Aluminium is the second most widely used commercial metal, after steel, at 88 million tonnes. It is the raw material of choice for a broad spectrum of sectors – aerospace, national defence, energy security, electrification, building & construction, transportation, automobile, aviation, consumer durables, and many

more. Aluminium has a strong output and employment multiplier effect on these sectors. It has forward linkages with aviation, defence, auto, electricity, construction, packaging, machinery, marine etc. and backward linkages with mining, chemical industry, power, machinery. Vedanta aligns itself to meet the growing needs of diverse applications across sectors. We cater to our customers' requirements through focused R&D and carefully developed new value-added products with highest quality and sustainability standards.

Vedanta has a capacity of 580 kT which is primarily used to produce electrical grade wire rods, which are then converted into wires, cables, conductors, transformer windings, etc. to cater to the electricity sector. We are the only company in India to produce flip coils for the steel industry. Our wire rods also find usage in the automotive segment as wirings and harnesses.

Our billets are in great demand in global markets like US& Europe. With a production capacity of 437 kT, our billets cater to sectors like building and construction industry (facade & fenestration for doors, windows, railings, elevators etc.), machinery, electrical, automotive and transportation.

Primary Foundry Alloys are the latest addition to our strong portfolio of value-added products, which are extensively used in automotive industry for making aluminium alloy wheels, cylinder heads and parts of IC Engines. We take pride in being the first domestic manufacturer to supply PFA to the Indian market.

Slabs and rolled products form the next segment of our value-added portfolio with a capacity of 100KT. They are primarily used in packaging, consumer durables, machinery & equipment, automotive, industrial engineering and building & construction.

Besides these, we also have developed Aluminium Silicon T-Ingots which are used for coating purposes by the steel industry. Simultaneously, our R&D teams are keeping a close watch on the market to develop new products for our customers future requirements.

Q6. Recently, the company launched its newest product line, Primary Foundry Alloy (PFA) for the Indian automotive industry. Please elaborate. How will PFA support the auto sector?

PFA's or primarily alloys of aluminium, silicon and magnesium, are known for their excellent metal quality and

outstanding cast-ability, making them a preferred choice for the automotive industry. We embarked on the path to roll out Primary Foundry Alloys looking at the demand from the automotive industry. Our PFA capacity of 240 KT feeds various segments of the automobile industry like alloy wheels, cylinder heads, brake systems, parts of IC engines and others. Prior to Vedanta's product launch, PFAs were imported into India, so, we take immense pride in being the first domestic manufacturer to supply PFA to the Indian market. We are also India's first and only primary aluminium producer to be accredited with International Automotive Task Force (IATF-TS 16949) Certification for our PFA, billets and slabs.

Currently, the share of aluminium alloy wheels in India is significantly lower compared to the rest of the world. With increased focus on light-weighting of vehicles, better aesthetics and other advantages, it is expected that over the next few years demand for PFA is expected to grow at ~ CAGR 14%. The biggest strength of Vedanta's products is that they conform to global specifications and standards and undergo rigorous quality assurance checks to ensure that customers access products of world-

class quality. Our capability to customise these alloys also equips the company to address the varying requirements of the auto customers. The introduction of PFA in our product portfolio is in keeping with Vedanta's belief that aluminium, as the metal of the future, holds significant strategic importance for the economy.

Q7. Vedanta has set a target to contain aluminium production cost to \$1,500 per tonne. By when and how will you achieve it?

Our target to be the world's lowest cost producer of aluminium pegs the cost of production at \$ 1200 per tonne, of which the two major cost components are alumina and power. We are continuously working on sourcing indigenous alumina and coal, both of which can significantly bring down our costs. Our world-class alumina refinery at Lanjigarh, which feeds our smelters in Jharsuguda and Korba (BALCO), is poised for a ramp up in capacity. This will potentially bring down our imports and with that our logistics costs. For coal, we bank on adequate production and timely delivery from CIL and its subsidiaries. With the recent amendments in coal sector policies by the Coal Ministry, we believe the reliability of coal production will improve in the years to come.

Q8. What are the type of projects you are currently working upon?

We are currently working with several different clients to develop different aluminium alloys for their specific applications. As aluminium is a very versatile, green and light-weight metal, its applications in electric mobility, aerospace, building and construction, and electrical distribution are evolving. We are working with current and prospective customers to develop alloys best suited to their unique needs.



Q9. 'Safety at site' is one of the key factors. What are your efforts towards safety?

Safety is one of our major thrust areas and our endeavors towards inculcating behavior-based safety is not limited to operational confines only. Our approach to business is driven by a safety-first attitude and we strive to imbibe the same as a part of our work culture. The basic framework of safety includes first and foremost, ensuring everyone stepping into the plant premises are equipped with the right Personal Protective Equipment (PPEs) basis their access to work sites. Second, our operations are divided into areas based on their safety requirements and we have stringent checks and measures in place to determine who is qualified to work where. Third, we have continuous monitoring of whether the

safety guidelines and protocols are being followed or not. Fourth, all mishaps, incidents, accidents etc. get recorded, investigated and analysed to ensure the same is never repeated. Fifth and most importance, regular (almost daily) communication, trainings, intervention and sensitization activities to foster awareness about the do's and don'ts of safety.

Some of our best practices in safety include enforcement of life-saving rules, Single Point Accountability systems, regular risk-assessment exercises, Suraksha Charcha, Process Safety Management, Vedanta Safety Standards, mock-drills to test emergency preparedness, etc. Our safety initiatives are driven by the safety teams along with the senior leadership themselves and the essence gets percolated right at the

bottom of the pyramid which comprises thousands of employees who work on our shop-floors. We have received many awards and accolades for our safety performance at state and national level.

In fact, the thing I'm most proud of about our safety practices is the fact that they are not confined to operational premises. Take the current scenario for example. We have rolled out all precautionary measures aimed at prevention of COVID-19 outbreak in any of our operations. From digitalizing almost every aspect of work, ensuring proper PPEs, enforcing social distancing at work, conducting thermal screenings of all employees to distributing masks, soaps and sanitizers to marginal communities, our safety practices go well beyond our operations to include the peripheral communities as well. ●