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CONSTRUCTION **TIMES**

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REBUILD INDIA



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The domestic industry needs to deepen R&D and innovation capabilities.

AJAY KAPUR

CEO – Aluminium & Power Business
 Vedanta Ltd



Could you please brief us on the current market trends for the Indian Aluminium Sector?

With the world's fifth largest reserves of bauxite and coal, India has the second largest aluminium production capacity in the world at 4.1 million tonnes per annum (MTPA). While the country's primary production grew at about 10.5% CAGR between FY16 and FY20, aluminium consumption grew at a much lower CAGR of 3.3% in the same period. 42% of total demand in the country is met through domestic production whereas 58% is imported, of which aluminium scrap is 63% and growing at ~12% CAGR (FY16-FY20).

What has been the impact of the pandemic on this segment so far?

Outbreak of the pandemic and associated lockdowns have brought their own set of

challenges for the Indian economy, Building & Construction (B&C) segment included. Since the imposition of lockdown in late March, real estate developers in large cities have kept few projects active due to reduced labour availability and credit tightness. The seasonal slowdown in demand from the B&C sector during monsoon was exacerbated by the effect of Covid-19 restrictions. Ground complexities have forced several states across the country to continue imposing strict norms at workplaces, like construction sites, even after the central government had relatively eased them. This has led to a slower than usual recovery of post-monsoon construction demand in Tier-1 and Tier-2 cities. However, the domestic aluminium industry has continued despite all disruptions.

What was the impact of the pandemic on your business performance?

At Vedanta's aluminium plants, we have not only sustained production at full capacity by leveraging smart solutions and digital technologies, but also used the opportunity to delve deeper into our R&D capabilities, work closely with our customers, reassess our product and market strategies, and streamline efficiencies for leading the industry in a post-pandemic world. We have strategies in place to stay on our planned course of action, which includes continuing our production, sales and even expansion plans. The past months have truly tested our resilience and made us more tenacious and agile. Although the worst is far from over, and we are yet to see the entire picture of the pandemic's impact on



our lives and businesses, we are working on emerging stronger, leaner and more adaptable than ever before.

What are the key continuing challenges which you foresee impacting the economy as a whole, and the Aluminium Sector post easing out of lockdown in stages?

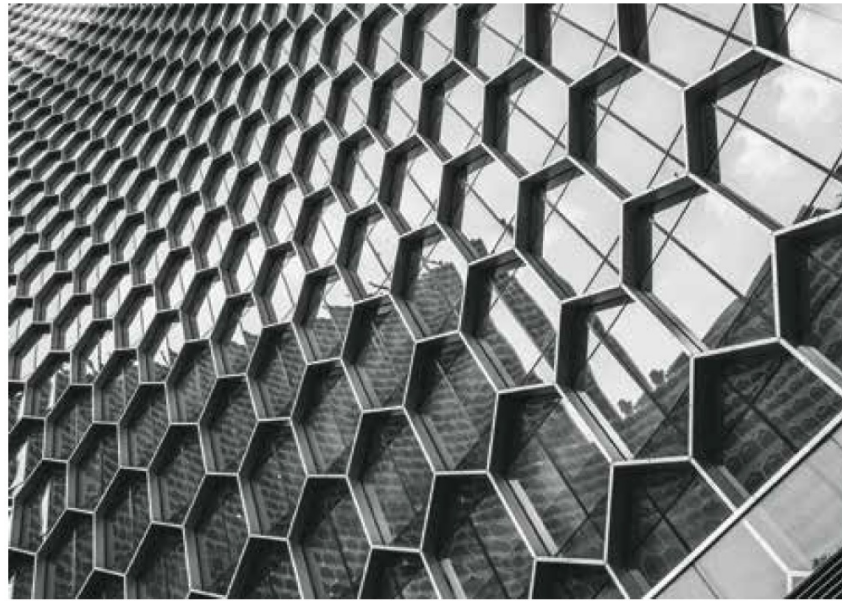
Stagnated demand seems to be the biggest challenge for the economy at the moment. Demand for key goods and commodities like fuel, food, consumer goods and electricity has fallen over the past few months.

But after months of locked down growth, the Indian economy is beginning to show signs of turnaround with higher 2-wheeler and passenger car sales, higher GST collection, manufacturing PMI and e-way bills for transporting goods. Although the festive season and materialization of pent-up demand have propelled this, it is reasonable to expect that this growth will be sustained over the next few months and eventually reach pre-Covid levels. The domestic aluminium demand depends on end-use consumption sectors like automobile, building and construction, electrical, consumer goods etc. With gradual recovery of the economy, we are seeing aluminium demand picking up as well.

What further measures / reforms should be undertaken by the states / central government for a healthy growth of the economy and triggering demand for Aluminium products?

At Vedanta Aluminium, which is the largest producer of aluminium in the country, we feel it a great travesty and absolute irony that India is the only country in the world that imports 60% of its aluminium demand, resulting in a forex outgo of USD 5 billion. And this is despite us having surplus domestic production capacity and the natural resources to produce it. This aberration needs to be addressed by our policy makers.

Globally, we are witnessing a growing trend of substituting traditional metals with aluminium, the metal of the future, owing to its superlative properties of light weight, corrosion resistance and infinite recyclability. India is very well placed to tap into the emerging opportunities from this trend. Being a growing economy, India needs to be self-reliant or 'AatmaNirbhar' in catering to the domestic demand from critical sectors, which is expected to double to 8-10 MnT over the next 5 years. The right policies in place and expeditious implementation of the recent mining reforms can propel India to create a globally competitive aluminium industry, eventually becoming a major export hub for aluminium primaries, semis and finished goods.



There are four major facets to focus on for true realization of this vision:

First, aluminium usage in government projects should be promoted and prioritised. With the aim to make India a USD 5 trillion economy, the central government is rolling out numerous high-impact projects like Make in India, National Capital Good Policy, Smart Cities, renewable energy capacity enhancement, 100% electrification of railways, building indigenous capability in defence equipment and space exploration, reforms in mining and coal sectors, etc., all of which can boost India's aluminium consumption.

Second, the domestic industry needs to deepen R&D and innovation capabilities, asserting its engineering expertise to tap into the current and emerging needs of the market. Our focus must be on perfectly tailoring new products and product variants to meet the needs of the market.

Third, the potential of aluminium industry should be acknowledged, and the industry should be recognised as 'core sector' with a National Aluminium Policy that will promote, protect and boost the domestic aluminium industry.

Finally, domestic capability needs to be harnessed for critical sectors. It is crucial that the entire potential of the aluminium value chain, from mining to end usage, is leveraged. Besides enhancing domestic capacity, reducing import dependency and trade deficit, it will also generate huge employment opportunities in our country.

On the B&C front, India has a long way to go in attaining design mastery using the properties of aluminium. With increasing focus on infrastructure, there are vast opportunities for aluminium applications and development of new alloys and other customizations to make the

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structures as light and as sturdy as possible. The Indian façade and fenestration industry is directly linked to the performance of construction and real-estate industry. Market analysts say that increase in multi-storey apartments in tier 2 and 3 cities, will lead to increased demand for aluminium and PVC in place of traditional materials like steel and wood.

What are the key areas of focus here?

The key areas of focus here are:

- Lack of awareness amongst builders about the wonderful properties of aluminium, resulting in environmental issues being pushed to the back burner in favour of short-term cost savings. Reluctance to incur minor additional expenditure on aluminium façade and fenestration, they generate more overall operational cost in the long-term. Rural and semi-urban areas usually prefer timber owing to the differential cost, despite its adverse environmental impact, followed by mild steel. The market is, therefore, inundated with low priced traditional materials to cater to the bottom of the pyramid. Aluminium, on the

other hand, can bring down energy expenses and increase longevity of the structure, with no adverse impact to the environment.

- Devoid of industry standards and regulatory bodies, the industry naturally remains fragmented and unorganized. India is yet to recognize the importance of façade consultants along with architects, structural engineers and mechanical, electrical & plumbing (MEP) consultants. Their expertise is crucial to assessing structural stability and keeping a check on inferior products and designs.
- With the industry being unorganized and fragmented, there is dearth of talent and domain expertise in the façade and fenestration sector, which, added to a lack of awareness, compounds the problem.

How do you see the impact on the investment scenario in this sector?

Although the pandemic has slowed the pace of growth in the sector, analysts predict notable growth in commercial and residential B&C segments in the times to come. As India envisions 20 million new homes in the next 10 years, the burgeoning demand for durable, sustainable, high performance and certified façade and fenestration products will boost usage of aluminium in B&C sector.

At Vedanta Aluminium, our production and sales plans remain largely on track. We continue to focus on developing our technological prowess and R&D capabilities, aimed at broadening our industry-leading value-added product portfolio. With growing dissent against imports from China, who incidentally dumps a lot of cheap aluminium scrap in the Indian market, this disruption has given us immense opportunity to cater to domestic demand with superior products, technology expertise and unparalleled customer service, while also swaying latent global demand in our favor.

What is your outlook on this segment in terms of disruptive technology adoption?

Globally, we are seeing a rise in smart technologies which are transforming the B&C sector. There are growing incidences of construction companies leveraging artificial intelligence, Augmented Reality (AR), assimilating past data and developing machine learning processes are offering a range of possibilities. Integration of building analytics and Internet of Things (IoT) capabilities can help make buildings safer and give myriad touchpoints to manage security, heating, cooling, energy usage, light optimization, and so on.



◀ India's per capita usage of aluminium in B&C segment, at 0.26 kg, is far below China's at 8.99 kg.

A lot is happening to transform the sector, from evolving aluminium alloys to integrating predictive technologies into construction. It is a very exciting space and at Vedanta Aluminium, we are keeping a keen eye on the developments in this sector and working on product strategies to cater to the emerging needs of our Building & Construction clientele.

What is the per capita consumption of aluminium products and what is the contribution from different segments?

Today, the world per capita consumption of aluminium is 11.6 kgs, whereas in sharp contrast India is at a mere 2.7 kgs. India's aluminium consumption is heavily concentrated in electrical segment (38%) on account of large-scale rural and urban electrification. This is followed by transportation (21%) and consumer durables (16%), and finally building & construction (11%), machinery (5%), packaging and others, which are yet to explore aluminium as a preferred alternative to traditional materials. That there is a huge growth opportunity for aluminium in India, is evident.

What the scope and potential from the Building & Construction sector?

Talking specifically about the building & construction (B&C) sector, India's per capita usage of aluminium in B&C segment, at 0.26 kg, is far below China's at 8.99 kg. Real estate and construction activity are one of the fundamental economic indicators of a region/economy. As per market analysts, India, China, Vietnam,

Australia and Indonesia will emerge building & construction hotspots on account of increasing urbanization, more commercial construction, greater migration into cities and improvement in standard of living. US, China and India are expected to occupy 50% share, worth \$87 trillion, of incremental construction spending over the next 15 years.

It is estimated that over 40% of India's population will live in cities by 2030. With rapid growth in urbanization and employment opportunities, the country's construction sector is expected to be the third largest in the world after China and US, with an overall value of \$1 trillion by 2025. The central gov't.'s plan to build 100 smart cities and rejuvenate 500 others backed by a budget of ₹ 98,000 crores is expected to give a huge boost to this sector.

Please brief us on the future outlook of the sector?

B&C is one of the key contributors to the Indian GDP, because of how intricately it is linked to core industry sectors and other growth drivers. About 250 ancillary economic segments such as cement, steel, brick, timber and building material are dependent on the construction industry. A unit increase in expenditure in the construction sector has a multiplier effect with the potential to generate as high as five-fold income. The ability of the B&C sector to use unconventional, eco-friendly materials, such as aluminium, and increase focus on green buildings and green technology will add to the sustainability of the sector.

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