BOBCAPS
TRUST | INNOVATION | EXCELLENCE

METALS & MINING

15 June 2022

Expert call with Alcoa: Supply deficit to prop up aluminium price

- **Aluminium price is being supported by deficits as supply disruptions outpace demand weakness**
- **While demand is softer with extended lockdowns in China and disruptions in auto, we may still see modest 2% growth in CY22**
- **China supply has rebounded faster, but curtailments in Europe and potential cuts in Russia are likely to put pressure on the supply chain**

Kirtan Mehta, CFA
research@bobcaps.in

We hosted Jim Dwyer, VP – Investor Relations and Pension Investments, Alcoa (AA US, Not Rated). Summarised below are our key takeaways together with highlights from company participation in other conferences over May-June.

Aluminium price supported by market deficits: Alcoa forecasts a higher deficit of 2mt for CY22 as supply disruptions outpace demand weakness. Inventory also remains low at the mid-40-day level. Despite the decline in prices, Alcoa expects Apr-Jun'22 to be a strong quarter with healthy EBITDA, albeit down QoQ.

Demand weak but should still grow in CY22: Alcoa forecasts positive demand growth of 2% in CY22. While extended lockdowns in China and a further pullback in automotive demand pose downside risks, a strong order book in North America, good offtake from European customers and healthy regional premiums indicate strong demand. Though the possibility of a demand shock remains, it is not a foregone conclusion yet. China's consumption is likely to rebound at some point given the committed high level of stimulus.

Supply disruptions continue: Out of 5mt of European smelting capacity, 0.7-0.9mt has already been curtailed and there is a further risk to 1-2mt of capacity due to the high energy prices. While Russian aluminium output decreases appear modest, the import of alumina into the country seems to be running at only half the required rate of 400kt per month. China's supply rebound has been faster, reaching a 40mt annualised run-rate, but is likely to top out at ~42-43mt over the next couple of years.

Medium-term outlook positive: Alcoa sees strong supply-demand dynamics over the medium term. Supply is likely to be constrained as China adheres to the announced cap of 45mt and the industry appears reluctant to build new smelters using conventional technologies, or without having adequate renewable power.

Working on breakthrough technologies: Alcoa's smelting solution, Elysis, is nearing completion with commercial utilisation targeted for FY24. The company is working on two technologies for refining and recycling post-consumer scrap (Astraea).

Additional highlights

Price supported by higher production costs

- The current alumina cost support level is ~US$ 350-370/t. The support level for aluminium varies regionally and depends on the energy source used as well as hedging mechanisms for a marginal smelter.
- Steepening of cost curves gives first-quartile producers an added advantage – more so for alumina refineries than smelters due to higher variations across operating/efficiency parameters.

Healthy medium-term demand outlook

- Alcoa specifically highlights the healthy demand for electric vehicles and packaging. For the automotive sector, the impact of a lower build rate is being partially offset by the increase in vehicles with higher aluminium intensity in the mix.
- Alcoa reiterates that demand from new infrastructure (such as power distribution and renewables) is more aluminium-intensive.
- While aluminium competes with other materials for substitution demand, the current price differential (>3x) to copper helps maintain its relative advantage.

Supply disruptions are significant

- **Europe** – The apparent production level for April understates actual underlying cuts. Alcoa believes that apparent production levels are supported by energy contracts, hedging mechanisms and the tap-out of more metal while closing pots. It believes that nearly 0.7-0.9mt of supply has been curtailed and another 1-2mt is at risk if energy prices remain high for longer.
- **China** – The increase in exports seen in recent months looks temporary and could stem from lower domestic demand amid lockdowns.
- **Russia** – While there is no clear visibility on the closure of smelters, Russia seems to be receiving only half of its 400kt/month alumina import requirement from China and other partners. This poses a risk to Russian supply. Also, Alcoa is receiving significant inquiries from customers in the West to move away from Russian metal.

Reinventing aluminium for a sustainable future

Alcoa expects to be at an advantageous position in a decarbonised world, being a low-carbon producer of alumina and aluminium. More than 80% of its smelting is powered by renewables and over 80% of its refineries use natural gas as fuel. The company is further working on several breakthrough technologies to lower its carbon footprint.

- **Smelting** – Alcoa's Elysis JV is close to developing an inert anode solution to eliminate Scope 1 carbon emissions from the smelting process. Two smaller smelters (60kA and 100kA) demonstrating this solution are already operating, construction of a commercial size cell (400kA) is targeted for CY23 and commercial deployment of the technology is targeted from CY24.

- **Recycling** – Alcoa is working on Astraea technology to convert post-consumer scrap into high purity aluminium. The technology is still 3-4 years away from a demonstration plant.
- **Refinery of the Future** – The company is working on two decarbonisation initiatives for electrical calcination and mechanical vapor recompression to limit carbon emissions and freshwater usage.

Alcoa now offers the broadest suite of low-carbon products and has started deriving a 'small' premium.

- **Ecolum** – This is a low-carbon aluminium product with only 4mt of CO_2e emissions per tonne of aluminium through the entire value chain (i.e. collectively for bauxite, alumina and aluminium production). Alcoa is currently selling trial production from the Elysis JV to Apple. It anticipates that 40% of its European sales could covert to Ecolum aided by uptake from automotive customers.
- **Ecodura** – This product has a minimum of 50% of recycled content and is offered globally.
- **Ecosource** – Alcoa offers a low-carbon alumina product (0.6mt of CO_2e emissions per tonne of alumina) from all its refineries.

Disclaimer

Recommendation scale: Recommendations and Absolute returns (%) over 12 months

BUY – Expected return >+15%

HOLD – Expected return from -6% to +15%

SELL – Expected return <-6%

Note: Recommendation structure changed with effect from 21 June 2021

Our recommendation scale does not factor in short-term stock price volatility related to market fluctuations. Thus, our recommendations may not always be strictly in line with the recommendation scale as shown above.

Rating distribution

As of 31 May 2022, out of 116 rated stocks in the BOB Capital Markets Limited (BOBCAPS) coverage universe, 69 have BUY ratings, 25 have HOLD ratings, 5 are rated ADD*, 1 is rated REDUCE* and 16 are rated SELL. One company rated ADD has been an investment banking client in the last 12 months. (*Our ADD and REDUCE ratings are in the process of being migrated to the new recommendation structure.)

Analyst certification

The research analyst(s) authoring this report hereby certifies that (1) all of the views expressed in this research report accurately reflect his/her personal views about the subject company or companies and its or their securities, and (2) no part of his/her compensation was, is, or will be, directly or indirectly, related to the specific recommendation(s) or view(s) in this report. Analysts are not registered as research analysts by FINRA and are not associated persons of BOBCAPS.

General disclaimers

BOBCAPS is engaged in the business of Institutional Stock Broking and Investment Banking. BOBCAPS is a member of the National Stock Exchange of India Limited and BSE Limited and is also a SEBI-registered Category I Merchant Banker. BOBCAPS is a wholly owned subsidiary of Bank of Baroda which has its various subsidiaries engaged in the businesses of stock broking, lending, asset management, life insurance, health insurance and wealth management, among others.

BOBCAPS's activities have neither been suspended nor has it defaulted with any stock exchange authority with whom it has been registered in the last five years. BOBCAPS has not been debarred from doing business by any stock exchange or SEBI or any other authority. No disciplinary action has been taken by any regulatory authority against BOBCAPS affecting its equity research analysis activities.

BOBCAPS has obtained registration as a Research Entity under SEBI (Research Analysts) Regulations, 2014, having registration No.: INH000000040 valid till 03 February 2025. BOBCAPS is also a SEBI-registered intermediary for the broking business having SEBI Single Registration Certificate No.: INZ000159332 dated 20 November 2017. BOBCAPS CIN Number: U65999MH1996GOI098009.

BOBCAPS prohibits its analysts, persons reporting to analysts, and members of their households from maintaining a financial interest in the securities or derivatives of any companies that the analysts cover. Additionally, BOBCAPS prohibits its analysts and persons reporting to analysts from serving as an officer, director, or advisory board member of any companies that the analysts cover.

Our salespeople, traders, and other professionals may provide oral or written market commentary or trading strategies to our clients that reflect opinions contrary to the opinions expressed herein, and our proprietary trading and investing businesses may make investment decisions that are inconsistent with the recommendations expressed herein. In reviewing these materials, you should be aware that any or all of the foregoing, among other things, may give rise to real or potential conflicts of interest. Additionally, other important information regarding our relationships with the company or companies that are the subject of this material is provided herein.

This material should not be construed as an offer to sell or the solicitation of an offer to buy any security in any jurisdiction where such an offer or solicitation would be illegal. We are not soliciting any action based on this material. It is for the general information of BOBCAPS's clients. It does not constitute a personal recommendation or take into account the particular investment objectives, financial situations, or needs of individual clients. Before acting on any advice or recommendation in this material, clients should consider whether it is suitable for their particular circumstances and, if necessary, seek professional advice.

The price and value of the investments referred to in this material and the income from them may go down as well as up, and investors may realize losses on any investments. Past performance is not a guide for future performance, future returns are not guaranteed and a loss of original capital may occur. BOBCAPS does not provide tax advice to its clients, and all investors are strongly advised to consult with their tax advisers regarding any potential investment in certain transactions — including those involving futures, options, and other derivatives as well as non-investment-grade securities —that give rise to substantial risk and are not suitable for all investors. The material is based on information that we consider reliable, but we do not represent that it is accurate or complete, and it should not be relied on as such. Opinions expressed are our current opinions as of the date appearing on this material only. We endeavour to update on a reasonable basis the information discussed in this material, but regulatory, compliance, or other reasons may prevent us from doing so.

We and our affiliates, officers, directors, and employees, including persons involved in the preparation or issuance of this material, may from time to time have "long" or "short" positions in, act as principal in, and buy or sell the securities or derivatives thereof of companies mentioned herein and may from time to time add to or dispose of any such securities (or investment). We and our affiliates may act as market makers or assume an underwriting commitment in the securities of companies discussed in this document (or in related investments), may sell them to or buy them from customers on a principal basis, and may also perform or seek to perform investment banking or advisory services for or relating to these companies and may also be represented in the supervisory board or any other committee of these companies.

For the purpose of calculating whether BOBCAPS and its affiliates hold, beneficially own, or control, including the right to vote for directors, one per cent or more of the equity shares of the subject company, the holdings of the issuer of the research report is also included.

BOBCAPS and its non-US affiliates may, to the extent permissible under applicable laws, have acted on or used this research to the extent that it relates to non-US issuers, prior to or immediately following its publication. Foreign currency denominated securities are subject to fluctuations in exchange rates that could have an adverse effect on the value or price of or income derived from the investment. In addition, investors in securities such as ADRs, the value of which are influenced by foreign currencies, effectively assume currency risk. In addition, options involve risks and are not suitable for all investors. Please ensure that you have read and understood the Risk disclosure document before entering into any derivative transactions.

In the US, this material is only for Qualified Institutional Buyers as defined under rule 144(a) of the Securities Act, 1933. No part of this document may be distributed in Canada or used by private customers in the United Kingdom.

No part of this material may be (1) copied, photocopied, or duplicated in any form by any means or (2) redistributed without BOBCAPS's prior written consent.

Company-specific disclosures under SEBI (Research Analysts) Regulations, 2014

The research analyst(s) or his/her relatives do not have any material conflict of interest at the time of publication of this research report.

BOBCAPS or its research analyst(s) or his/her relatives do not have any financial interest in the subject company. BOBCAPS or its research analyst(s) or his/her relatives do not have actual/beneficial ownership of one per cent or more securities in the subject company at the end of the month immediately preceding the date of publication of this report.

The research analyst(s) has not received any compensation from the subject company in the past 12 months. Compensation of the research analyst(s) is not based on any specific merchant banking, investment banking or brokerage service transactions.

BOBCAPS or its research analyst(s) is not engaged in any market making activities for the subject company.

The research analyst(s) has not served as an officer, director or employee of the subject company.

BOBCAPS or its associates may have material conflict of interest at the time of publication of this research report.

BOBCAPS's associates may have financial interest in the subject company. BOBCAPS's associates may hold actual / beneficial ownership of one per cent or more securities in the subject company at the end of the month immediately preceding the date of publication of this report.

BOBCAPS or its associates may have managed or co-managed a public offering of securities for the subject company or may have been mandated by the subject company for any other assignment in the past 12 months.

BOBCAPS may have received compensation from the subject company in the past 12 months. BOBCAPS may from time to time solicit or perform investment banking services for the subject company. BOBCAPS or its associates may have received compensation from the subject company in the past 12 months for services in respect of managing or co-managing public offerings, corporate finance, investment banking or merchant banking, brokerage services or other advisory services in a merger or specific transaction. BOBCAPS or its associates may have received compensation for products or services other than investment banking or merchant banking or brokerage services from the subject company in the past 12 months.