METALS & MINING

18 July 2024

Alumina tightness to keep aluminium complex elevated

- **Indian players to benefit from upside in aluminium and alumina realisations in Q2, according to Alcoa and Rio Tinto's results**
- **Integrated aluminium players with captive resources are not exposed to alumina upside and will retain benefit of raw materials cost reduction**
- **Aluminium smelters dependent on imported alumina are facing cost increases; these players are in India, South East Asia and Middle East**

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Read-across from Q2 results of global majors: We summarise read-across for Indian aluminium players from Alcoa's Q2CY24 earnings and Rio Tinto's Q2 production reports. Alcoa clocked ~150% QoQ improvement in EBITDA in Q2, reflecting the benefit of pricing upside on high operating leverage.

Upside in realisation in Q2: Indian players are likely to benefit from upside in both aluminium (LME prices) and alumina. Alcoa and Rio Tinto indicate US$ 250-325/t QoQ upside in aluminium realisations. Indian players may be able to realise higher upside on alumina than Alcoa (US$ 27/t QoQ) due to their open spot positions.

Integrated players to benefit from easing of costs: Rio Tinto indicates 20%/15% HoH cost reduction for petroleum coke and coal tar pitch in H1CY24 on top of caustic soda reductions in the prior period. While integrated players may not be impacted by the rise in alumina prices, players dependent on external alumina will lose savings in raw materials to the increase in alumina costs.

Alumina tightness to continue in CY24: Alumina tightness is the result of supply disruptions in China (refinery curtailments due to domestic bauxite shortages), Australia (Queensland Gas pipeline breakage and Kwinana curtailments) and other regions amid rising demand from aluminium restarts in Yunnan, China. Alcoa estimates the global alumina deficit at 0.8mt in Q2 and at 3mt for CY24. Alcoa believes that the production cost of 'marginal' refinery has risen close to US$ 400/t.

Aluminium price drivers: Aluminium price has found support from: (i) recent trade defense actions in North America and Europe which have increased domestic demand in the region, thereby supporting higher prices, and (ii) increase in alumina prices (Alcoa's API indicator at US$ 480/t) has increased cost support levels.

Exposure to imported alumina to lower profitability in the near term: Alcoa highlights that a high-cost smelter, which is at the margin on a global cost curve, may face difficulty in sourcing alumina. These marginal smelters are likely in India, South East Asia and the Middle East.

Read-across from Q2CY24 results of global majors

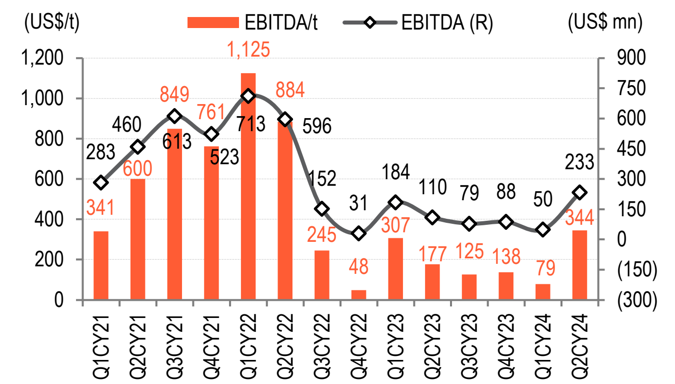
Alcoa demonstrates benefit of pricing upside this quarter

- **Earnings change is higher due to higher operating leverage for Alcoa.** Sequentially, Alcoa's adj. EBITDA increased from US$ 132mn in Q1CY24 to US$ 325mn in Q2CY24. The sequential improvement was the result of the US$ 240mn contribution from external market movements (metal prices, Alumina Price Index [API], and raw materials) and reduction in production costs of US$ 25mn, offset by US$ 72mn of company-specific factors.

- **Aluminium segment clocks higher improvement.** The aluminium segment's EBITDA/t staged a material improvement of US$ 265/t QoQ to US$ 344/t driven largely by a ~US$ 215/t increase in realisation and ~US$ 50/t decrease in costs.

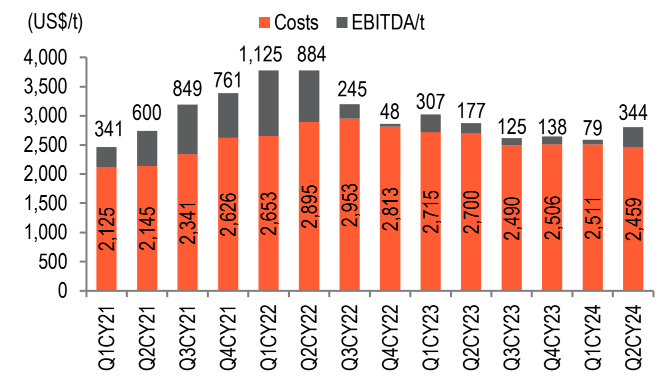
- **Alumina segment continues improvement journey.** The alumina segment's EBITDA/t also improved by US$ 15/t QoQ to US$ 57/t, including the benefit of third-party bauxite sale. The segment benefitted from US$ 29/t QoQ improvement in API pricing. However, the benefit was partially offset by increase in costs.

Fig 1 – Alcoa's aluminium EBITDA/t improves sequentially…



Source: Company, BOBCAPS Research

Fig 2 – … driven by sequentially higher realisations and marginal cost decline



Source: Company, BOBCAPS Research

Fig 3 – Alcoa's aluminium cost and profit breakdown

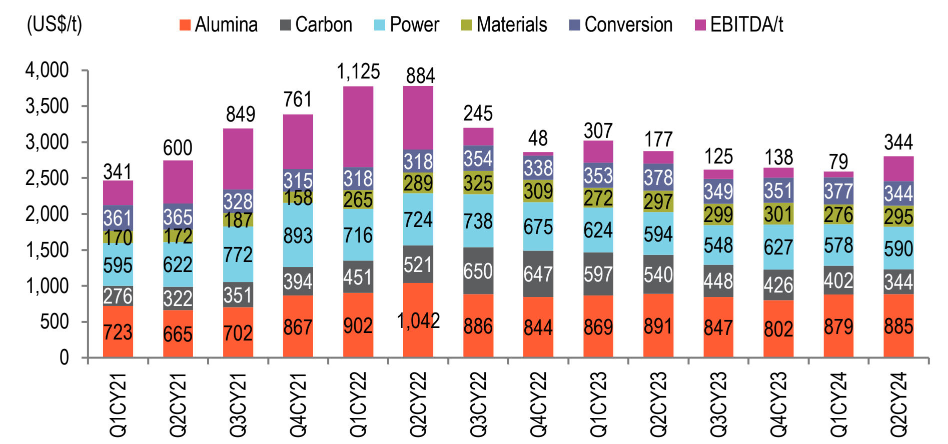


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Fig 4 – Alcoa's alumina EBITDA continues to improve…

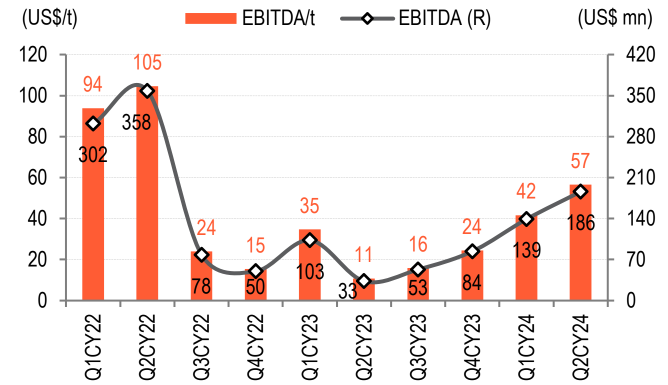

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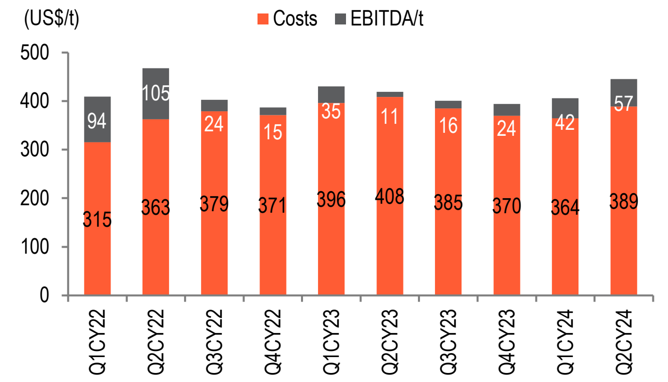
Fig 5 – … with higher API and lower raw material costs



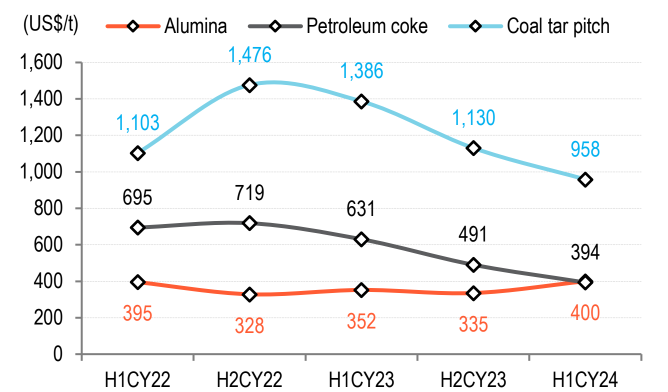
Source: Company, BOBCAPS Research

Rio Tinto Q2 production result also indicates margin upside

Rio Tinto's Q2 production release points to improvements in margin for the aluminium chain.

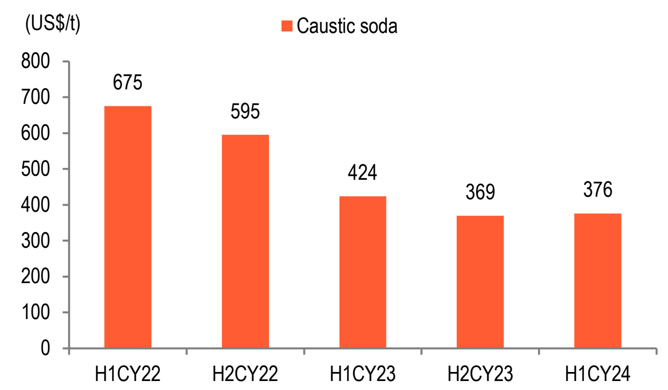
- **Realisation upside:** Rio Tinto also indicates a sequential upside in aluminium realisation of US$ 323/t, which compares with US$ 248/t reported by Alcoa.
- **Increase in alumina price offsets benefit of price declines in other raw materials:** Rio Tinto indicates that petroleum coke prices eased 20% HoH to US$ 394/t in H1CY24, whereas coal tar pitch came off 15% HoH to US$ 958/t in H1CY24. However, the benefit of this reduction is likely to be offset substantially by increase in alumina price by US$ 65/t QoQ to US$ 400/t in 1HCY24 as per the indicator.
- **Alumina production cut:** Due to the Queensland Gas pipeline breakage, Rio Tinto's alumina production was 10% lower YoY. With the impact of reduced availability of gas likely to continue till the end of CY24, Rio Tinto lowered its annual CY24 alumina production guidance to 7.0-7.3mt from 7.6-7.9mt.
- **Bauxite supply improved:** Rio Tinto was able to increase bauxite production 9% YoY and 10% QoQ with the implementation of Safe Production System at Weipa.

Fig 6 – Rio Tinto's aluminium cost element indicators



Source: Company, BOBCAPS Research

Fig 7 – Rio Tinto's caustic soda cost indicator



Source: Company, BOBCAPS Research

Commentary on global markets

- **Alumina market likely to be in deficit through CY24.** Alcoa estimates that the global alumina market experienced a deficit of 0.8mt in Q2CY24, which could translate to a full-year deficit of 3mt. The deficit is driven by supply disruptions as well as increase in aluminium demand primarily due to the resumption of previously curtailed production in Yunnan, China. Chinese refineries are seeing curtailments due to the shortage of domestic bauxite in China. Production disruptions in Australia had resulted from (i) the 0.6mt cut in production guidance by Rio Tinto due to the breakage of the Queensland Gas pipeline in northeastern Australia and (ii) 1.4mt cut in refining capacity in western Australia due to Alcoa's curtailment of production at its Kwinana refinery.
- **Alumina cost support level has risen close to US$ 400/t.** Due to the need to operate less cost-efficient refineries, the cost support level for alumina has risen close to US$ 400/t currently.
- **Marginal aluminium smelters are likely to come under pressure.** Alcoa believes that the availability of alumina could become a point of pressure for some high-cost marginal smelters on the global cost-curve in the near term with rise in Alcoa's API indicator to US$ 480/t. Some of these 'marginal' smelters are likely to be in India, South East Asia and the Middle East.
- **Aluminium price support drivers.** (i) Recent trade defense actions in North America and Europe have increased domestic demand in the region, supporting higher prices. (ii) Increase in alumina prices (Alcoa's API indicator is at US$ 480/t) has increased cost support levels.
- **Aluminium demand steady.** Aluminium demand from packaging is continuing to recover. While electrical and automotive demand have been resilient, European automotive demand has slowed in recent months. While building and construction remains the most challenged sector, the start of interest rate cuts in Europe and potential rate cuts later this year could create grounds for some uplift in demand from the sector.
- **China-affiliated supply options progressing.** With a capacity cap in China, Alcoa notes that some Chinese producer-affiliated projects have started advancing outside of China, ie, in Indonesia and Angola.
- **Regional premiums moved up in Q2.** Regional premiums in North America, Europe and Asia rose due to reduced supply availability arising from (a) US and UK sanctions against Russian aluminium metal, and (b) supply chain disruptions driven by shipping disruptions in the Red Sea.
- **The long-term outlook for aluminium is strong** with demand growth supported by (i) the use of aluminium as an energy transition metal and (ii) increase in demand for low-carbon aluminium, (iii) the capacity cap (of 45mt) restricting supply growth in China, and (iii) the availability of competitive renewable energy restricting new supply additions outside China.

Sustainability pointers

- **Low-carbon aluminium price index has evolved** in Europe, North America and Asia.
- **First industrial-scale demonstration of ELYSIS technology.** Rio Tinto and the Government of Quebec will fund the first industrial scale demonstration plant based on ELYSIS technology for production of low-carbon metal. The demonstration plant is set to start in CY27 and will include 10 ELYSIS smelting pots operating at 100kA in Quebec, adjacent to Rio Tinto's existing Arvida smelter. Alcoa will supply anodes and cathodes for the demonstration.

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