

Aluminium: China's march towards 'net-zero' flips market expectations

China's ambition to achieve a 'net zero' carbon goal is fuelling expectations about dwindling supply growth over the medium- to long-term. Meanwhile, supportive macro drivers, together with a synchronous demand recovery in the short term, is pushing investors to place bullish bets on aluminium



Source: Shutterstock

Beyond the macro story, aluminium has found some fresh momentum

Aluminium has fared well this year, with LME 3M prices gaining over 13% year-to-date. The market seems to have shrugged off stock building in China and is focusing on the positives. Yet, we currently don't expect a shortage for 2021 as a whole. So what's behind the recent strong performance?

1. We discussed some of the macro drivers in a recent [note](#) on the commodities bull run, focusing on copper. Aluminium shares the same narrative on future demand from the energy transition. We also briefly touched on the copper-to-aluminium ratio which hit a

record high last week. After the recent macro-driven rally in copper, aluminium looks relatively cheap in comparison.

2. Aluminium demand has continued to recover from a traumatic year in 2020. In the short term, there are some structural issues in different types of aluminium supply (ingot, billet, scrap) across different regions, and freight rates have helped to push up the regional premium and fuel market optimism.

Meanwhile, unlike copper, aluminium has a major story rooted in its supply-side which is tied to the global decarbonisation move. This is mainly due to the energy-intensive nature of aluminium smelting. This recent focus is again on China.

We think that the market has found some upside momentum from rising supply risks. The market has long worried that China has been relentlessly building new smelting capacity and supplying the rest of the world with a large amount of semi-fabricated products.

However, expectations have turned 180 degrees just in the last couple of weeks. There are now concerns that China supply may fall short of estimates with capacity expansion being capped, and there may be even further downside risks.

It's all about China's 'net zero' carbon targets

Discussions on 'net zero' carbon targets are getting heated ahead of the annual political rite- the 'Two Sessions' this week. It is expected that this year the country may list the 'net-zero' carbon emissions target as one of the Top 5 priorities ([China: What to expect from the 'Two Sessions'](#)).

The story is twofold.

1. There have been official documents from both the state-level and the provincial-level calling for actions to hit the 'net-zero' target. The State Council issued a [circular](#) on 22 February urging efforts to 'build an economic system featuring green, low-carbon and circular development, and to promote an overall green transformation of the economy and society'. China Inner Mongolia has been scaling up its efforts to cap the total amount of energy consumption and average energy efficiency (hereafter referred to as 'dual control'). According to the latest [discussion paper](#) from the provincial planner published on 25 February, the region will ban capacity expansion on a number of industries including aluminium smelting, alumina refining, steel and ferroalloys from the start of 2021. As part of the 'dual control' targets, the region came up with power tariff differentials last month and those energy-intensive industries are now faced with higher power costs. Aluminium smelting costs are susceptible to power costs as these account for around 30-40% of input costs in production in China. Meanwhile, Inner Mongolia accounts for around 14% of total Chinese notional aluminium smelting capacity, and over 90% of smelters from the region are running on a captive power supply that is burning coal to generate electricity.
2. Large organisations are working on plans to cut carbon emissions to align with the national target. On 25 January, Chinalco and Weiqiao, China's two biggest aluminium makers, issued a joint proposal on how their industry should seek to reduce emissions, conserve energy and produce low-carbon metal, as part of a national plan to achieve carbon neutrality. Meanwhile, in the steel sector, it came as a big surprise that China Baowu Group, also one of China's biggest steelmakers, has [vowed](#) to achieve carbon neutrality by 2050, which is 10 years ahead of the national target. Further details are not yet available, but there have been rising expectations about putting a cap on the overall crude steel production growth

from this year.

What are the key implications to supply in China?

Some in the market are drawing a parallel between China's recent decarbonisation drive and the nation's supply-side reform put forward in 2015 when the Chinese government put a limit (or so-called capacity ceiling) on overall aluminium smelting capacity. In more recent years, the aluminium industry has been mainly reshuffling or migrating capacity geographically within the country, namely to build new capacity in renewable energy abundant regions such as Yunnan province, and in the meantime shutting down old capacity with coal-fired power supply, the so-called 'capacity swap'.

With the decarbonisation goal in mind, it's becoming clearer that China is unlikely to end up with ever-growing smelting capacity which could exceed the ceiling capacity. Going forward, there will be a greater focus on the policy tone with regards to the 'net zero' target and what policies come up for the 14th Five Year Plan.

In the meantime, the market has been speculating that other provinces/regions from China may follow similar steps as Inner Mongolia. The implications are also twofold. First, there may be no wiggle room for special-status projects or so called-illegal capacity. Second, rising production costs due to the potential hike in power tariffs may lead to the further risk of closure.

We had previously expected that China's primary aluminium production would grow by 7% year-on-year in 2021, with major contributions from new projects or an expansion in projects that were committed to last year, especially from southwestern China. Should there be further pressure on aluminium operations from those 'old' production regions, then there could be clearly downside risks to that growth target.