

Aluminium to slip into a deeper deficit

Slower growth in primary aluminium production and strong consumption suggest the aluminium market will see a larger deficit over 2022. This deficit, coupled with steadily declining inventories mean prices should trade higher



Workers at an aluminium factory in Hebei Province, China

The second-best performer in 2021

Aluminium prices have continued to rise over 2021 and it's the second-best performer amongst LME base metals after tin. As we noted earlier this year, the [aluminium market is entering into a new era](#) with prices steadily grinding higher as the market continues to tighten, despite China having released stocks from its state reserves. In October, LME 3M prices surged, breaking above the US\$3,200/t mark as supply was [caught in a perfect storm](#) with the energy crisis in China and Europe.

Question marks around primary supply growth

Primary aluminium's supply-side developments are key here. They're dominated by significant disruptions due to China's 'dual-control' mandate of energy intensity and total energy consumption. Lately, power shortages from China and Europe have led to lower than expected supply growth.

As the world's largest primary aluminium producer and the key growth contributor over the last

decade, Chinese primary production fell short of expectations by more than 1.2Mt. We expected growth to be close to 8% YoY but the final figure came in at just above 3%. At the peak, more than 3.8Mt of capacity was impacted and 80% was due to the dual-control mandate.

We assume the power issues that affected a large part of China during the last quarter of 2021 will continue into early 2022. And Chinese 'green' policies are detrimental to the timing and scale of restarts and whether those uncommitted projects will actually be given the go-ahead.

Aluminium smelters saw a double-whammy due to both the power crunch and the dual-control mandate

Another uncertainty centres around Yunnan, which has emerged as China's largest primary aluminium production hub. Power shortages emerged in the region earlier this year (before the widespread power crunch in 4Q21) due to low water reservoirs, and aluminium smelters saw a double-whammy due to both the power crunch and the dual-control mandate. For 2022, we only expect very moderate growth in production with restarts and ramp-ups only likely in the latter part of the year. Over the medium term, secondary supply will need to pick up the pace to fill the gap. There have been quite a few projects announced recently, but the supply of secondary aluminium is inelastic and it will take some time to see any significant volume.

As such, additional primary supply growth is heavily reliant on the rest of the world. However, access to cheap and clean power supplies remains a key factor determining the sustained supply growth from existing projects and new supply in the future. The power crisis in Europe is expected to lead to primary production falls for the third year in a row. The latest developments regarding an Icelandic energy supplier cutting power to aluminium smelters highlights the fragility of the situation. Within the announced restarts and new projects in the medium term, we expect very limited capacity to come online in 2022.

Consumption continues to power on with a hint of 'green'

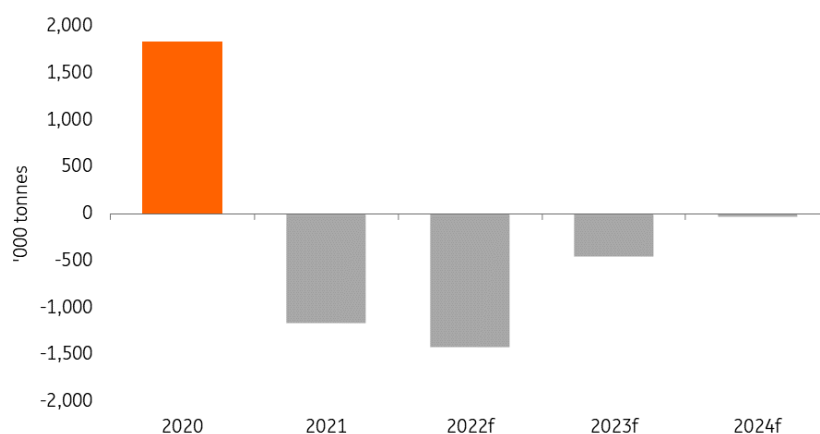
Aluminium consumption continued to recover strongly in 2021, underpinned by large stimulus packages. This is in spite of many supply chain constraints. In addition, we're seeing more aluminium consumption from green-related areas such as solar energy and the 'lightweighting' of autos. We expect aluminium to continue to benefit from this global energy transition-related area in the future ([Electric vehicles to drive metals demand higher](#)).

Semiconductor shortages have had a widespread impact on automakers. Nevertheless, aluminium's heavier use in some premium end vehicles has been less impacted as automakers prioritise this part of the car segment. ING economists expect the semiconductor shortage to let up in 2022, but only gradually. Hence, we expect this aluminium consumption to rebound next year. We also expect strong construction demand to continue to power on from North America and Europe, although strong consumer demand from the US may cool a little as the economy pivots from goods to services, weighing on Chinese exports of aluminium goods and semis.

We think China's total primary aluminium consumption growth will cool in 2022 to 0.5% YoY. Incremental consumption will be heavily reliant on the country's domestic market. Despite great concerns around the Chinese property sector, we expect late-stage property construction to

turn more supportive to aluminium consumption. As we also discussed in the iron ore section, we do not expect a reversal of government policy, rather some fine-tuning supportive measures to drive pipeline projects to completion.

Primary aluminium market balance



Source: IAI, ING Research

Prices expected to recover some lost ground

In late October, aluminium prices slipped from US\$3,100s/t as the market saw disruptions peak and Chinese coal prices fall after strong government intervention in the market. However, primary aluminium supply continues to lag behind consumption which suggests that the market will continue to tighten, and as a result support prices. [Cost inflation](#) is another issue despite falling coal prices. We expect the aluminium market to slip into a deeper deficit of around 1.5Mt in 2022 and prices to recover their lost ground.

ING forecasts

	1Q22	2Q22	3Q22	4Q22	FY22
LME Aluminium (US\$/t)	2,850	2,950	2,900	2,910	2,900

Source: ING Research

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