

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.

Author

Alissa Lefebvre

Economist

alissa.lefebvre@ing.com

Deepali Bhargava

Regional Head of Research, Asia-Pacific

Deepali.Bhargava@ing.com

Ruben Dewitte

Economist

+32495364780

ruben.dewitte@ing.com

Kinga Havasi

Economic research trainee

kinga.havasi@ing.com

Marten van Garderen

Consumer Economist, Netherlands

marten.van.garderen@ing.com

David Havrlant

Chief Economist, Czech Republic
420 770 321 486

david.havrlant@ing.com

Sander Burgers

Senior Economist, Dutch Housing

sander.burgers@ing.com

Lynn Song

Chief Economist, Greater China

lynn.song@asia.ing.com

Michiel Tukker

Senior European Rates Strategist

michiel.tukker@ing.com

Michal Rubaszek

Senior Economist, Poland

michal.rubaszek@ing.pl

This is a test author

Stefan Posea

Economist, Romania

tiberiu-stefan.posea@ing.com

Marine Leleux

Sector Strategist, Financials

marine.leleux2@ing.com

Jesse Norcross

Senior Sector Strategist, Real Estate

jesse.norcross@ing.com

Teise Stellema

Research Assistant, Energy Transition

teise.stellema@ing.com

Diederik Stadig

Sector Economist, TMT & Healthcare

diederik.stadig@ing.com

Diogo Gouveia

Sector Economist

diogo.duarte.vieira.de.gouveia@ing.com

Marine Leleux

Sector Strategist, Financials

marine.leleux2@ing.com

Ewa Manthey

Commodities Strategist

ewa.manthey@ing.com

ING Analysts

James Wilson

EM Sovereign Strategist

James.wilson@ing.com

Sophie Smith

Digital Editor

sophie.smith@ing.com

Frantisek Taborsky

EMEA FX & FI Strategist

frantisek.taborsky@ing.com

Adam Antoniak

Senior Economist, Poland

adam.antoniak@ing.pl

Min Joo Kang

Senior Economist, South Korea and Japan

min.joo.kang@asia.ing.com

Coco Zhang

ESG Research

coco.zhang@ing.com

Jan Frederik Slijkerman

Senior Sector Strategist, TMT

jan.frederik.slijkerman@ing.com

Katinka Jongkind

Senior Economist, Services and Leisure

Katinka.Jongkind@ing.com

Marina Le Blanc

Sector Strategist, Financials

Marina.Le.Blanc@ing.com

Samuel Abettan

Junior Economist

samuel.abettan@ing.com

Franziska Biehl

Economist, Germany

Franziska.Marie.Biehl@ing.de

Rebecca Byrne

Senior Editor and Supervisory Analyst

rebecca.byrne@ing.com

Mirjam Bani

Sector Economist, Commercial Real Estate & Public Sector (Netherlands)

mirjam.bani@ing.com

Timothy Rahill

Credit Strategist

timothy.rahill@ing.com

Leszek Kasek

Senior Economist, Poland

leszek.kasek@ing.pl

Oleksiy Soroka, CFA

Senior High Yield Credit Strategist

oleksiy.soroka@ing.com

Antoine Bouvet

Head of European Rates Strategy

antoine.bouvet@ing.com

Jeroen van den Broek

Global Head of Sector Research

jeroen.van.den.broek@ing.com

Edse Dantuma

Senior Sector Economist, Industry and Healthcare

edse.dantuma@ing.com

Francesco Pesole

FX Strategist

francesco.pesole@ing.com

Rico Luman

Senior Sector Economist, Transport and Logistics

Rico.Luman@ing.com

Jurjen Witteveen

Sector Economist

jurjen.witteveen@ing.com

Dmitry Dolgin

Chief Economist, CIS

dmitry.dolgin@ing.de

Nicholas Mapa

Senior Economist, Philippines

nicholas.antonio.mapa@asia.ing.com

Egor Fedorov

Senior Credit Analyst

egor.fedorov@ing.com

Sebastian Franke

Consumer Economist

sebastian.franke@ing.de

Gerben Hieminga

Senior Sector Economist, Energy

gerben.hieminga@ing.com

Nadège Tillier

Head of Corporates Sector Strategy

nadege.tillier@ing.com

Charlotte de Montpellier

Senior Economist, France and Switzerland

charlotte.de.montpellier@ing.com

Laura Straeter

Behavioural Scientist

+31(0)611172684

laura.Straeter@ing.com

Valentin Tataru

Chief Economist, Romania

valentin.tataru@ing.com

James Smith

Developed Markets Economist, UK

james.smith@ing.com

Suvi Platerink Kosonen

Senior Sector Strategist, Financials

suvi.platerink-kosonen@ing.com

Thijs Geijer

Senior Sector Economist, Food & Agri

thijs.geijer@ing.com

Maurice van Sante

Senior Economist Construction & Team Lead Sectors

maurice.van.sante@ing.com

Marcel Klok

Senior Economist, Netherlands

marcel.klok@ing.com

Piotr Poplawski

Senior Economist, Poland

piotr.poplawski@ing.pl

Paolo Pizzoli

Senior Economist, Italy, Greece

paolo.pizzoli@ing.com

Marieke Blom

Chief Economist and Global Head of Research

marieke.blom@ing.com

Raoul Leering

Senior Macro Economist

raoul.leering@ing.com

Maarten Leen

Head of Global IFRS9 ME Scenarios

maarten.leen@ing.com

Maureen Schuller

Head of Financials Sector Strategy

Maureen.Schuller@ing.com

Warren Patterson

Head of Commodities Strategy

Warren.Patterson@asia.ing.com

Rafal Benecki

Chief Economist, Poland

rafal.benecki@ing.pl

Philippe Ledent

Senior Economist, Belgium, Luxembourg

philippe.ledent@ing.com

Peter Virovacz

Senior Economist, Hungary

peter.virovacz@ing.com

Inga Fechner

Senior Economist, Germany, Global Trade

inga.fechner@ing.de

Dimitry Fleming

Senior Data Analyst, Netherlands

Dimitry.Fleming@ing.com

Ciprian Dascalu

Chief Economist, Romania

+40 31 406 8990

ciprian.dascalu@ing.com

Muhammet Mercan

Chief Economist, Turkey

muhammet.mercan@ingbank.com.tr

Iris Pang

Chief Economist, Greater China

iris.pang@asia.ing.com

Sophie Freeman

Writer, Group Research

+44 20 7767 6209

Sophie.Freeman@uk.ing.com

Padhraic Garvey, CFA

Regional Head of Research, Americas

padhraic.garvey@ing.com

James Knightley

Chief International Economist, US

james.knightley@ing.com

Tim Condon

Asia Chief Economist

+65 6232-6020

Martin van Vliet

Senior Interest Rate Strategist

+31 20 563 8801

martin.van.vliet@ing.com

Robert Carnell

Regional Head of Research, Asia-Pacific
robert.carnell@asia.ing.com

Karol Pogorzelski
Senior Economist, Poland
Karol.Pogorzelski@ing.pl

Carsten Brzeski
Global Head of Macro
carsten.brzeski@ing.de

Viraj Patel
Foreign Exchange Strategist
+44 20 7767 6405
viraj.patel@ing.com

Owen Thomas
Global Head of Editorial Content
+44 (0) 207 767 5331
owen.thomas@ing.com

Bert Colijn
Chief Economist, Netherlands
bert.colijn@ing.com

Peter Vanden Houte
Chief Economist, Belgium, Luxembourg, Eurozone
peter.vandenhoute@ing.com

Benjamin Schroeder
Senior Rates Strategist
benjamin.schroeder@ing.com

Chris Turner
Global Head of Markets and Regional Head of Research for UK & CEE
chris.turner@ing.com

Gustavo Rangel
Chief Economist, LATAM
+1 646 424 6464
gustavo.rangel@ing.com

Carlo Cocuzzo
Economist, Digital Finance
+44 20 7767 5306
carlo.cocuzzo@ing.com