

WORKING DOCUMENT

Aluminium excess capacity: time to act

We urge G7 leaders to formally request G20 to create a Global Multilateral and Governmental Forum on Aluminium Overcapacity.

A roadmap to a sustainable global aluminium market

Global demand for aluminium is growing and will require commensurate growth in primary smelter production, recycling and semi-fabricated aluminium products. Subsidized overcapacity and other market-distorting behaviour, though, is undermining the sustainable growth of the global aluminium industry for both primary and downstream aluminium producers. It is time for G20 leaders to provide a collective and multilateral response by creating a multilateral global and governmental forum on aluminium overcapacity.

Aluminium primary smelting overcapacity in China is expected to grow 30% in 2018, compared to 2017¹. It represents 3.3 million tons of additional capacity in just one year, more than the total production of Canada, the 4th producing country. Total capacity in China is estimated to reach 49 million tons – or 54% of global capacity. The situation is similar further down the value chain, with a steep increase of exports of Chinese aluminium semi-fabricated products. Aluminium associations around the world have witnessed evidence of massive distortions in the Chinese economy in the sector, endangering the business models of firms in the rest of the world.

In May 2017, leaders of the G7 in Taormina committed to address global excess capacity in the steel, aluminium and other key industrial sectors. In July 2017, political leaders of the G20 in Hamburg recognized the sustained negative impacts on domestic production, trade and workers due to excess capacity in these sectors. They urgently called for the removal of market-distorting subsidies and other types of support by governments and related entities. In November 2017, the Global Forum on Steel Excess Capacity facilitated by the OECD issued a report with concrete policy recommendations. Monitoring is now in place in the steel sector and some moderate capacity cuts have taken place. Political leaders and government officials from around the world have acknowledged the problem of excess capacity in the aluminium sector, and it is time for global leaders to act on a solution.

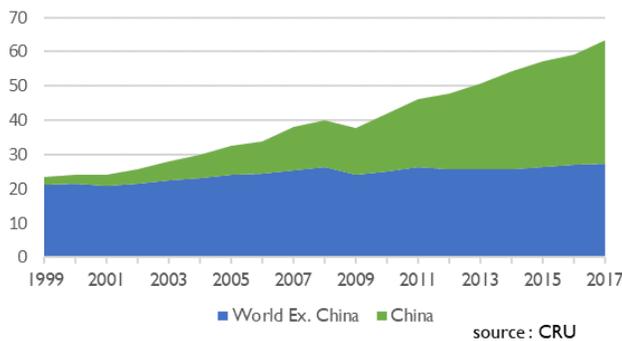
A briefing note by the Aluminium Associations of Japan, Europe, Canada and the United-States

¹ Production and consumption figures in the document are from [CRU](#) unless otherwise stated and are in metric tons

China : a leader in aluminium production

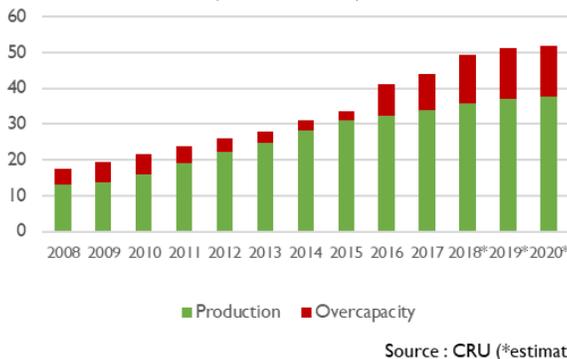
From 10% in 2000, Chinese manufacturers now supply 53% of the world's primary aluminium. They intend to grow their capacity to 52 million tons by 2020, a 25% increase in comparison to 2016 figures. In 2017, Chinese production has grown by 13% while growth in other producing regions increased by 2%. China's capacity growth exceeds growth in China's domestic consumption.

Global production of primary aluminium
(in million tons)



Excess of primary aluminium capacity in China has piled up to 10 million tons in 2017, with another 3.3 million tons expected in 2018. It means that China could almost match the production of other G20 countries just by restarting idled capacities. Chinese aluminium smelting utilization rate is around 70% when it is around 88 % in the rest of the world.

Primary Aluminium in China
(in million tons)



Overcapacity in primary has spilled over into production in semi-fabricated then into other downstream aluminium products (like windows or ladders) targeting exports. The massive expansion uncorrected by natural market forces led to a decreasing utilization rate of around 70% today.

Aluminium Semi-Fabricated
Products in China
(in million tons)



Overcapacity in semis has been multiplied by 4 since 2008. Chinese exports of aluminium extrusions, rolled products and fabricated products have been multiplied by three between 2009 and 2016, reaching 6 million tons per year (source : [Antaike](#)).

The drivers of this growth

Initially China frantically boosted its aluminium production in order to answer the needs of an amazing wave of urbanization and industrialization. From less than a million tons in 1990, to 2.8 in 2000 to 20 in 2010 and close to 34 million tons in 2017, China's phenomenal increase in primary aluminium production went as planned. It required huge resources:

- It is estimated that China has spent 120 to 150 billion dollars to build its aluminium capacity.
- China has also built, in less than 30 years, the equivalent of France's electricity supply, (i.e. around 500 TWh of annual power), mostly coal based in order to feed its aluminium smelters.
- The massive expansion also required the build-up of capacities in alumina refining and anode production, new transmission lines and infrastructure.

This happened with substantial governmental intervention in various forms. A recent study² analysed a massive database of government plans, programmes, party and company reports. It documented massive distortions in the Chinese economy and its non-ferrous metals sector in particular. It demonstrates direct interventions in the pricing of capital, labour, land, raw materials and basic inputs to the production process. Firms which were judged strategic (nationally and internationally) received billions (in RMB and USD) of equity injections, plain financial subsidies or non-monetary support. Energy subsidies also stand out, profiting most Chinese state-owned enterprises. Other non-operating income subsidies have been distributed in the context of programmes for plant relocation, green development, technology, innovation, revitalization, trademark, patents and R&D.

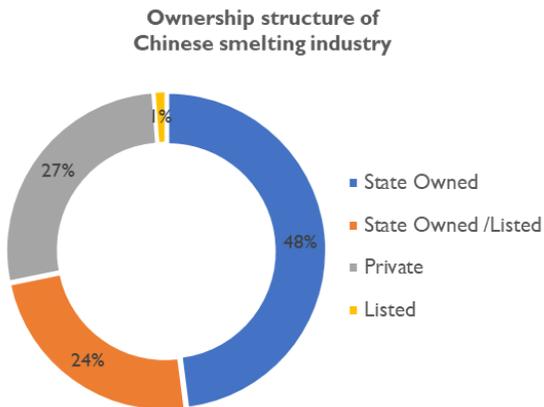
“In the past years, both the U.S. and the E.U. have faced increased imports and dumping of steel and aluminium, mostly from Asia. To a large extent, this has been the consequence of global overcapacity, in particular in China, fueled by massive domestic subsidies”.

Jyrki Katainen - Vice President of the European Commission

in scarce supply in the domestic economy. This has been translated into an export tax of 15% on primary aluminium and scrap, and an export tax rebate of 13 to 15% on semi-fabricated products

(rolled products and extrusions).

Some producers are exporting certain aluminium semi-fabricated products to take advantage of the lower export taxes, even though those products are designed to be re-melted in the same way as primary aluminium that faces the higher export tax.



Source : European Aluminium

These policies contaminate the whole value chain. China has always been keen to promote imports of raw materials (bauxite, scrap, etc.) and advanced machinery required for industry operations, and exports of processed metals products (foil, wheels, etc...). However, tight restrictions and outright bans are applied to the export of raw materials located at the beginning of the value chain and processed goods

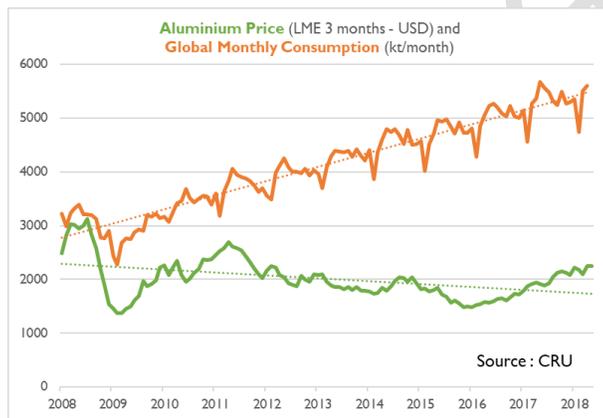
² THINK!DESK China Research & Consulting – [Analysis of Market-Distortions in the Chinese Non-Ferrous Metals Industry](#) – 24/04/2017

The impacts on other market players

Aluminium is a truly global commodity, traded on two exchanges, the London Market Exchange (LME) and the Shanghai Futures Exchange (SHFE). Both exchanges are heavily correlated over time. The LME prices ultimately reflect the total global supply and demand for the metal, regardless of where it is produced, sold or stored. Furthermore, unlike steel, aluminium being a lighter and more expensive raw material, transport costs are a small share of the finished good price, meaning that aluminium travels easily.

LME and SHFE are liquid markets, paper transactions representing much higher movements than physical ones. Speculators' anticipations of potential global movements are therefore reflected in the prices of the material.

With 45 million tons of capacity, including close to a third of excess capacity, to be compared to 16 million tons of capacity in the rest of the G20 countries, China's heavyweight aluminium champions cast a deterring shadow over global markets.



Primary aluminium consumption has grown globally by 85% between 2009 and 2017, reflecting the dynamism of the downstream market and the higher penetration of the metal, for instance in the automotive industry. Yet its market price is depressed. In North America and in Europe, the demand has increased by 45% in the same period, yet the price does not reflect this increase. In fact it has fallen by more than 40% between 2008 and 2016.

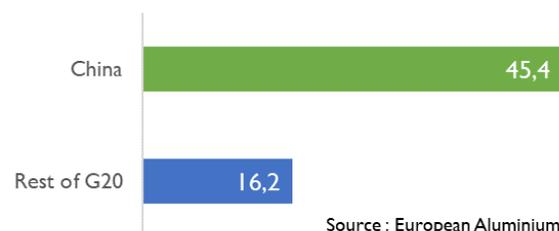
"The United States could lead a coalition of larger trading partners and allies against China, or to let China know that they are breaking the rules left and right. That's the way I'd like see. You call it a sort of trade coalition of the willing."

Larry Kudlow, Director of National Economic Council

With energy prices rising in most countries worldwide, contrary to China where state interventions helped aluminium smelters reduce their power bills, little margin

is left for investments and modernization. Plants that had to match new environmental regulations have not been able to cover compliance costs and have had to close. From twelve operational smelters in the United States in 2013, only five are operating today and only two at full capacity. This represents the lowest level of U.S. production since just after World War II. The European Union's primary aluminium production has been decreased by a third between 2008 and 2012. Long term price signals are also depressed. And even in the unlikely event that prices could rise again, China's idled capacity is ready to spring back to supply. Financial analysts deter investors from putting money in new greenfield smelters.

Primary aluminium capacity (in million tons)



Source: European Aluminium - 2017

As China grows its overwhelming share of the market by adding new capacity upstream and downstream, enabled by state subsidies and support programmes of all forms, it progressively undermines existing privately-owned competition, while inhibiting market-driven expansion outside the country. What is clearly at stake here from the industry's standpoint is the ongoing erosion of free and fair trade of aluminium caused by China's built up overcapacity and unruly market behaviour.

Why does it matter for China and for the rest of the world?

China has seen the unsustainable shadow of this overcapacity. Triggered by new and more stringent environmental regulation, the Beijing-Tianjin-Hebei region decided to implement seasonal cuts for aluminium smelting and alumina refining primarily to protect the air quality in major cities and the provinces.

Beyond environmental issues, China is also aware of the downward economic cycle it has entered into since 2014. Its aluminium needs follow the trends of an aging population. With close to 270 million tons of aluminium produced since 2005, more than the United States has produced in its 125 year history, China has built a huge stock of aluminium which is stranded in products in use. As the products come to their end of life, the stock will be available as scrap and be reinjected in the metal flow. If demand slows down, capacity continues to rise and scrap is more available, the prices will remain depleted and there will be huge quantities of metal available for exports. The longer China keeps piling up excess capacities, the more painful and costly it will be to curtail them.

In the rest of the world, aluminium manufacturers take strategic decisions to adjust to the global context leading to major operational actions like splitting up upstream and downstream operations, streamlining business models, optimizing competitiveness by modernizing plants, restructuring labour, optimizing input costs, and sometimes curtailing production, mothballing or dismantling plants. Governments and administrations worldwide have kept a close watch on this restructuring for the following reasons:

- the metal is a key component in the aerospace industry and in other strategic sectors of the economy;
- the sector provides well paid jobs to skilled workers often in high unemployment areas;

“Canada is a trading nation, and we will not allow North American industries to be hurt or threatened by unfair trade practices, like the diversion of steel and aluminum. Our businesses and workers rely on our integrated industries, and we will take strong action to defend and protect our most important trade relationships. Canada will not be used as a backdoor into other North American markets. Our people have worked hard to be competitive in this global economy, and they deserve a level playing field.”

Justin Trudeau, Prime Minister of Canada

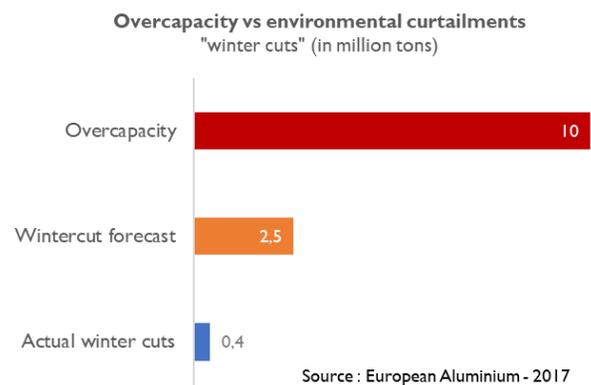
restructuring, curtailment or closures imply a heavy social cost that is often hard to mitigate;

- aluminium is also a key enabler for climate change solutions like car lightweighting, clean energy production.

Current actions while useful cannot address the real structural issue

Actions have already been taken in different areas of the world to address the symptoms of the overcapacity issue, but have had little impact or have even been counterproductive in an aluminium value chain where little resilience remains after years of depressed market prices.

In China, recent curtailments due to environmental concerns (so called “winter cuts”) have only a very limited impact on overall excess capacity as they were totally outweighed by new capacity coming on line due to investment decisions that came in long before unacceptable levels of pollution were recorded. While the Government of China has been keen to implement additional measures, the Provinces have been reluctant to accept the socio-economic impacts of curtailments, and private companies continue to benefit from direct and indirect government support.



Anti-dumping and countervailing measures have been imposed in some areas and on some products like extrusions and foil in the United States or on road wheels and foil in Europe. Vast segments of the market remain unprotected. These selective

measures, while temporarily useful, are a narrow fix to a demonstrated problem. The market needs more structural changes to the government policies that underpin the unfairly traded imports.

In April 2017, the U.S. Secretary of Commerce initiated an investigation under section 232 of the Trade Expansion Act of 1962, to determine the effects on the national security of imports of aluminium. The report led to a decision in March 2018 to implement a 10% tariff on all aluminium products, with a temporary exemption for Mexico, Canada, the E.U. and some other countries. The exemption has expired on June 1st. Canada has retaliated and has announced plans to levy tariffs on U.S. goods including steel, aluminium and other products. The E.U. has also firmly reacted, has opened a case at the World Trade Organization and is consulting the different member states to also impose tariffs on a number of imports from the United States.

This unilateral action has revealed some massive difficulties throughout the value chain in other territories. With the implementation of a tariff in one region of the world, the metal simply flows to another region which is in turn more impacted. Furthermore, even if American mothballed smelters were to restart at near full capacity they could never supply the growing needs of the downstream sector, which have increased by 45% since the low of 2009. The U.S. produces less than 1 million ton of primary, the total capacity is less than 2 million for a consumption of 5 to 6 million tons. With U.S. tariffs, downstream producing countries will face higher import prices and their own competitiveness will suffer in their own and other markets. The whole value chain would be hit by a snowball effect. It clearly appears that unilateral action will not address the root cause of persistent Chinese aluminium overcapacity.

This simply demonstrates how interconnected and organically woven the global aluminium supply chain is designed. To this point, unilateral and bilateral measures have, at best not addressed the root cause of global aluminium overcapacity, and at worst have

introduced an unprecedented level of uncertainty and disruption.

Given the amount of capital that an aluminium project requires, in the hundreds of million for a brownfield revamping, and in the billions for an extension or a new greenfield smelter, producers and financiers need certainty over the long term future to secure a decent return on their investments. As long as 13 million tons of excess capacity sit idle in China waiting to be restarted, investments just won't happen, and anti-dumping or tariffs, which are temporary measures by construction, will not change this.

The Global Forum on Steel Excess Capacity (GFSEC): an interesting path to follow

Overcapacities also exist in the steel sector, and has become particularly acute since 2015. Requested by G20 leaders at the Hangzhou summit in September 2016 in China, the forum was subsequently established gathering 33 member economies representing more than 90% of global steel capacity. The OECD acts as the facilitator of the forum. As the first report concluded in 2017 “[Overcapacity] depresses prices, undermines profitability, generates damaging trade distortions, jeopardizes the very existence of companies and branches across the world, creates regional imbalances, undermines the fight against environmental challenges and dangerously destabilizes world trading relations. It especially undermines income opportunities of employees. Alleviating excess capacity becomes a necessary condition for more stable, profitable and sustainable business and employment conditions, which allows the industry to face a number of long-term challenges more effectively.”³³. This statement could easily apply to aluminium as well.

The steel forum is primarily a government policy information-sharing mechanism to exchange information on potential government policies to address excess capacity, market distorting subsidies and other government measures that contribute to excess capacity. It has already led to the emergence of concrete policy solutions, based on principles that reflect the converging views of members in these

³³ [Global Forum on Steel Excess Capacity – Report – 30th of November 2017](#)

three main areas of government policies: 1) the acknowledgement of the global nature of the excess capacity and the necessity of policy based collective solutions, 2) the importance of enhancing market function and encouraging adjustment, 3) the need for improving transparency, review and assessment of market developments and steel policies.

Calling for a Global Multilateral and Governmental Forum on Aluminium Overcapacity

The aluminium industry in Europe, in the U.S., Canada and Japan believe that the solution comes from a multilateral institutional and governmental approach. The setting of a similar platform to the GFSEC would be the first brick of a new architecture of governance of a sustainable, market based, fair and innovative aluminium sector.

Key characteristics

- Government led with the inclusion of G20 countries representing 80% of the world primary aluminium market in 2017. Significant non G20 countries with important aluminium production also include Norway, Bahrain, Iceland, Malaysia, Qatar and Mozambique
- Institutionally based, with OECD as a potential host and facilitator, with contributions from the World Trade Organization and think tanks.
- Industry fed, with business associations answering governmental consultations

Objectives

- Develop a governmental system for aluminium international monitoring of information in relation to overcapacities
- Benefit the whole value chain, from upstream to downstream through government policy
- Avoid disruptive government policy effects at border on fairly produced and traded aluminium
- Monitor government support measures and roll out key policy measures to ensure a global level playing field
- Provide solutions for the long term to the underlying systemic issues

Timeline

- Announcement at the G20 in Argentina in November 2018
- First meeting of the forum in December 2018
- Ministerial Conference to implement measures by March 2019
- Presentation of the report and measures taken at the next G20 in Osaka end of 2019

We urge G7 leaders to formally request G20 to create a Global Multilateral and Governmental Forum on Aluminium Overcapacity.

We believe that the G20 is the right place for governments to discuss the appropriate format of such a forum, where an inter-governmental dialogue can take place, enabling evidence based decisions.

We stand ready to support G20 leaders with knowledge, data and commitment to define an operational and workable mechanism in which all the producing countries will find trust, transparency and solutions for the future.

We foresee key benefits in the future for all stakeholders involved

Once trust and confidence is brought back in a well-functioning undistorted aluminium market, all countries will benefit. The Chinese aluminium industry will be able to develop, in a more sustainable fashion, the appropriate manufacturing balance to curtail production where necessary and modernize the rest. The transparency on capacities and policy measures provided by the forum will bring the long term price signal closer to market fundamentals, clearing the horizon for companies to the benefit of investments, jobs and climate change.

Where we come from

- Acknowledgement of overcapacity by many stakeholders
- Evidence of government support measures and trade distortions
- Link made between overcapacity, depressed market prices leading to factory shutdowns and lack of investment

Where we are now

- Unilateral measures have been taken to protect some of the markets, creating some turmoil in the global aluminium value chain.
- China's program to reduce capacities has had a very limited impact.
- G20 launched a global steel forum leading to some measures.

Where we need to be

- Create a global multilateral and governmental forum on aluminium overcapacity
- Involve producing and consuming countries, governments which consult with institutions, associations and think tanks
- Cover upstream and downstream aluminium
- Government information sharing on capacities, production and support policies

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Montreal, 4th of June 2018