Call on EU policymakers to address imminent supply shortage of Chinese magnesium

EUROPEAN ALUMINIUM

Position paper, 27 September 2021

Risk of Europe-wide shutdowns due to Chinese magnesium supply shortage

→ **In light of an imminent international supply shortage of magnesium originating from China, European Aluminium calls on the EU Commission and national governments to urgently work towards immediate actions with their Chinese counterparties.**

→ **With an 87% production share, China has a near-total monopoly on global magnesium manufacturing. In 2001, Europe was forced to close its remaining magnesium production as a consequence of dumped Chinese imports, and now depends for 95% on China's supply.**

→ **Europe is expected to run out of magnesium stocks in 1 or 2 months' time. A supply shortage of the current magnitude risks production stoppages in the aluminium value chain, affecting sectors such as automotive, building or packaging. Other magnesium-using sectors are diecasting, and iron and steel production.**

→ **The current magnesium supply shortage is a clear example of the risk the EU is taking by making its domestic economy dependent on Chinese imports. The EU's industrial metals strategy must be strengthened - aluminium cannot become the next industry leakage case.**

IN DETAIL

To curb domestic power consumption, Chinese production of magnesium has recently been halted or curtailed to such an extent that **deliveries to Europe have drastically dropped since 20 September 2021.** With an 87% global share in magnesium production, the Chinese supply shortfall has already resulted in **record prices[1] and worldwide distortions in the supply chain**. Europe has been especially hit by the supply shortage as about 45% of all Chinese exports are destined for Europe. **Chinese exports supply 95% of the magnesium needs in Europe, the vast majority[2] is used by the European aluminium industry**, followed by the automotive and steel industry[3].

A key alloying material, magnesium is an essential raw material for the production of aluminium alloys[4]. Notwithstanding the role magnesium plays in European value chains, Europe's last magnesium production plant was closed in 2001 as a consequence of dumped Chinese imports. Between 2000 and 2021, China's magnesium production increased from 12% of the global supply to 87%, creating an effective international monopoly on a 1.2 million tonnes/p.a. market demand.

> **China's power curbing: the case of magnesium production**
>
> In the world's main magnesium production hubs, Shaanxi and Shanxi Provinces, 25 magnesium plants had to shut down and 5 further plants had to cut production by 50% amid China's power curbing rollout.
>
> Estimates predict that European magnesium stocks will run out by end-November.

The magnesium sector is only one in a long list of production leakages since the early 1990s. European primary aluminium production alone has lost more than 30% of its capacity since 2008. In parallel, China continuously increased production capacity to meet the steady increase in European and global demand for both aluminium and magnesium.

The European aluminium industry's **dependency on Chinese magnesium harbors dramatic risks** as it is expected that China will now direct the remaining production to its domestic aluminium extrusion and rolled products industries - **with European companies no longer receiving the necessary raw materials to continue production.** Under these circumstances, European Aluminium cannot preclude further plant closures.

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[1] The level of 2000$/tonne at the beginning of the year is now 4 times higher.

[2] About 45% of the magnesium supply goes to the aluminium industry in Europe. Total magnesium imports of the EU were 155 ktonnes in 2020, where of 95% from China. The European aluminium industry needs around 100 ktonnes of magnesium to produce its alloys.

[3] Globally the use of magnesium in aluminium represents approx. 38% of all using sectors; diecasting (36%); iron & steel (12%), metal reduction (8%)

4 Aluminium alloys produced for automotive, building or packaging applications typically use 4.9% magnesium

OUR POLICY ASKS

Europe's innovation and investment potential can no longer absorb the steady erosion of our economy by unfair trade practices and unreliable market actors. **The block's strategic autonomy must be preserved.** Therefore, European Aluminium urges EU policymakers to address the current supply shortage with their Chinese counterparties and work towards immediate solutions. For the long-term, **European Aluminium calls on the European Commission and national governments to address the structural reasons for Europe's failure in maintaining complete, thriving value chains.**

1

Short-term measures

- We urge the European Commission to immediately enter into a dialogue with China to restart magnesium exports and ensure reliable supply.
- The magnesium supply shortage should be discussed in the same international fora as the semi-conductors shortage.

  The Directorate General for Trade (DG Trade) should closely monitor the remaining imports of magnesium into the EU, both in terms of volumes and prices.

2

Mid-term measures

- To protect European industries from China's unfairly low-priced imports, the European Commission must act fiercely against China's WTO-incompliant state support and dumping.
- In line with the Commission's legislative priorities (see *Stronger Europe in the world*), a clear interlink between EU industrial and robust trade defence strategies must be established and coordinated across the relevant Directorates General and the EEAS.
- In line with the Commission's legislative priorities (see *Promoting the European way of life*), trade defence policies must be designed taking environmental performance and human, labour and social rights into consideration.

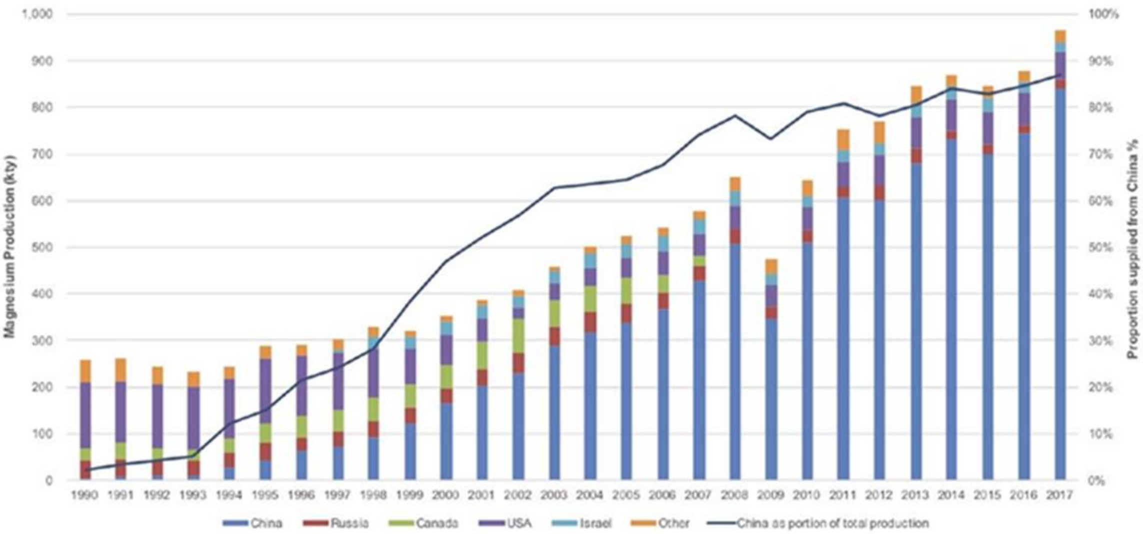
3

Long-term measures

- Delivering on the EU's 2050 industrial leadership and sustainability objectives cannot go without a strong trade strategy, level playing fields and comprehensive support for EU-based value chains. Increased coherence between the various policy areas of the European Union is, thus, substantial.
- To that effect, we need to preserve value chains in Europe and diminish dependency on unreliable partners.
- Following Europe's exemplary push for a domestic battery value chain and semi-conductors manufacturing, a restart of raw materials production in Europe, including magnesium, must be at the core of the European strategic autonomy roadmap.

ANNEX

Figure 1 - Evolution of magnesium production per region (1990-2017)



The magnesium market:

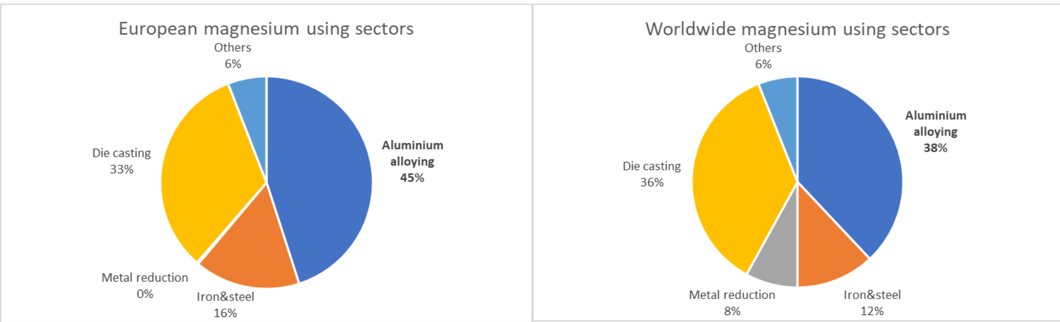
Annual demand: 1.2 million tonnes, with 87% being produced by China and 39% being used by China.

Europe and North America use each around 19%. Japan uses 4%.

Europe is particularly hit by the current supply shortage since almost all magnesium used in Europe is imported from China.

Source: CM Group, The Magnesium Report 2017, July 2018, p.60.

Figure 2 – Magnesium using sectors (Europe and worldwide)



Source: European Aluminium, 2021