

European Aluminium represents the entire value chain of the aluminium industry in Europe. We welcome the opportunity to share our views on the European Commission's plans to increase the EU climate ambition for 2030 and on the future design of EU energy & climate and policies to deliver on its European Green Deal Agenda. Europe's transition to a low carbon economy can only be achieved with more aluminium¹.

This paper complements our response to the Public Consultation on the EU 2030 targets plan. It explains why **our view is that increasing the EU's GHG emission reduction target from the current 40% to a higher level should be done only with a new climate and energy policy design that explicitly recognises EU carbon leakage and sets up an enabling framework to protect the aluminium industry in Europe.**

This is the "*condition sine qua non*" for our support to the EU's increased climate ambition.

Aluminium: a crucial material for achieving Europe's Climate Neutrality and strategic autonomy

Aluminium is the most used non-ferrous metal and the second most widely used metal after iron. Aluminium delivers energy and CO₂ savings in leading sectors, including mobility and transport, packaging, consumer goods, and building and construction. The endless recyclability of our metal further contributes to decarbonisation and the circular economy. Given such enormous potential and uses, higher climate ambition spurs the demand of our material in many applications and technologies, thus enabling the achievement of the green transition.

When compared to other energy intensive industries (e.g. steel or chemicals), aluminium primary production is already electrified, and Europe's carbon footprint is one of the lowest in the world. Such is our level of electrification that a decarbonised power system would reduce the sector's carbon footprint by 70% overall vs 1990 levels by 2050.

Furthermore, according to the EU's Long-Term Emission Reduction Strategy² in 2015 the energy intensive industry sectors directly emitted approximately 700 million tonnes of CO₂, which represents a reduction by more than 30% compared to 1990 levels. This was the second largest source of emissions reduction after the power sector (for production and heat). For aluminium, since the late nineties, primary aluminium in Europe has dramatically decreased - by 55 percent - its total direct CO₂ emissions³.

Challenges: carbon leakage and global competition

There is no climate rationale to increase the 2030 targets if carbon leakage cannot be stopped and the EU does not set an enabling framework to protect its aluminium industry. Our sector is exposed to international trade and faces higher energy costs compared to other global producers.

Europe has lost more than 30% of its primary capacity since 2008, despite growing global demand for our product and related investments. Such demand is instead being met by increased imports of carbon-intensive products,

¹ See [here](#) World Bank Group Report "*Minerals for Climate Action: The Mineral Intensity of the Clean Energy Transition*", May 2020

² See [here](#) European Commission in depth analysis document at p. 19 & 25

³ Source [European Aluminium, Vision 2050](#): Today, primary aluminium production in Europe generates about 6.7 kg of CO₂ equiv. per kg; the carbon intensity for aluminium produced in China is three times higher

whereas EU production is declining. This is because no aluminium smelter outside Europe is exposed to carbon costs in their electricity prices, as well as other regulatory costs, primarily linked with European climate policies⁴.

In parallel, China today produces 60% of worldwide primary aluminium ingots (up from just over 10% in the year 2000). In the past five years, Chinese exports of semi-fabricated products to the EU have more than doubled. Combined with the fact that the production of primary aluminium in China is, on average, three times more carbon intensive than the production of the same metal in Europe, this is clear and undeniable evidence that carbon leakage has already occurred and is continuing to occur in our sector, leading to a net increase in global emissions.

Also for aluminium recycling, where energy savings represent 95% compared to primary production, higher cost stemming from more ambitious climate policies, may harm the competitiveness of European producers and further increase carbon leakage, given the need to increase recycling as metal sourcing to satisfy the growing demand⁵ on the one hand, and on the other its reliance on gas and fuel for the re-melting process.

Finally, we commend the EU's commitment to globally lead on the implementation of the Paris Agreement. However, such reflection must go hand in hand with a reflection on **how to reinforce its strategic autonomy in global value chains, preserve existing industrial assets and re-shore the production in Europe instead of relying on carbon-intensive imports**. Industries in Europe need today more than ever an enabling framework to be more energy-efficient, competitive, circular, and sustainable to deliver and invest in climate neutrality while operating in a free and fair-trade environment⁶.

The revised 2030 GHG Target should preserve EU's strategic value chains

While we recognise the immediate threat climate change poses to our ecosystems and the need to take action, it is even more important to ensure that these actions are actually capable of achieving their intended purpose (i.e. reducing global emissions). To this end, it is crucial to preserve our value chain in Europe, which is already among the least carbon intensive in the world. In other words, until other regions show the same climate ambition as Europe and comparable industries pay the same climate costs, **policymakers need to ensure that higher climate ambition is met with reciprocal measures to protect our industry, which is among the most, if not the most, exposed to carbon leakage**. Otherwise, reduced European production will only increase our dependency on primary imports with a significantly higher carbon footprint. This would lead to an increase in global emissions, i.e. the exact opposite effect from the one the Commission intends to achieve.

As a consequence, our industry can support an increase of the EU's 2030 target to reduce greenhouse gas domestically **only if the following conditions are all met:**

- The Commission must **first carefully impact assess in detail the impact of a higher target on EU industries' competitiveness and exposure to carbon leakage, as well as considering how carbon leakage could be prevented under each scenario**. Such assessment will have to look at the impact of a higher target on electro-intensive industries like aluminium, an analysis of carbon pricing options and outline measures to

⁴ Since aluminium is globally priced by the London Metal Exchange (LME), European producers cannot pass on these extra carbon costs without losing significant market share and are price takers on the market. The ongoing review of the State Aid ETS Guidelines are thus crucial for protecting the European producers' competitiveness against carbon leakage. See [here](#) our position paper on the draft ETS Guidelines, March 2020

⁵ See [here](#) our Aluminium Circular Aluminium Action Plan, May 2020

⁶ See [here](#) our position paper and policy recommendation on the New EU Industrial Strategy for Europe

protect our industry against carbon leakage. Such impact assessment should also factor in the impact of the COVID crises⁷.

- The Commission must present a **clear strategy to ensure the availability of climate neutral electricity at globally competitive prices**, including support schemes to facilitate corporate investments in renewable technologies and a policy framework for long-term power purchase agreements (PPAs). Incentives for industrial facilities participating in energy balancing markets and demand response schemes should also be considered. The upcoming energy system integration and hydrogen strategies represent an opportunity to further decarbonise the power-system⁸ and spur public and private investments to decarbonise our value chain. **Natural gas should be supported and play a crucial role to improve energy system efficiency by providing flexibility to the system and stable supply.**
- An improved and **more adequate indirect costs compensation scheme to protect aluminium producers from carbon leakage in Phase IV of the EU ETS**. Given both the complexity of our value chain and the significance of indirect emission for our production process, a Carbon Border Adjustment Measure (CBAM) does not seem like a viable carbon leakage instrument for aluminium⁹ and therefore cannot be viewed as a silver bullet that is capable of preventing carbon leakage under any scenario. Priority should thus be given to improving the ETS indirect Guidelines and ensuring the possibility for Member States to grant targeted aid to those undertakings that are the most exposed to electricity costs. Additional carbon leakage measures, beyond a CBAM, should be considered and analysed in the ongoing impact assessment.
- A more **globally focused competition policy** to accelerate industrial transformation. This should include a revised state aid policy framework, including revised State Aid Guidelines on Energy & Environment (EEAG) that goes beyond the Important Projects of Common European Interest (IPCEI) approach tailored to support strategic value chains that must innovate and are at risk of carbon leakage, while also supporting the development of low-carbon products.
- **Achieving aluminium's full circular potential by 2030**: Europe should support our industry to achieve a 100% recycling rate for all products containing aluminium. Aluminium recycling process requires only 5 percent of the energy needed to produce the primary metal, thereby avoiding high CO₂ emissions by replacing carbon-intensive aluminium imports¹⁰. However, the re-melting processes depends a lot on natural gas. Natural Gas must thus remain a transition fuel until affordable carbon-neutral solutions are available. One promising alternative is for example Bio-Methane. The Commission should consider measures to boost investments and grow its market availability in Europe. These could include for example a Europe-wide administration system for renewable gas to support cross border trade.
- **A realistic and supportive EU Taxonomy Framework to accelerate green investments in the European Aluminium value chain**: We strongly oppose the ETS benchmark as a compulsory criterion for eligibility to the EU taxonomy. A threshold based on the ASI-methodology¹¹ would best reflect the carbon footprint of European smelters compared to the aluminium industry globally or the possibility freely choose two out of

⁷ See [here](#) European Aluminium Policy Recommendations for an EU sustainable industrial recovery plan (May 2020)

⁸ See [here](#) our position on the upcoming Strategies on Energy Sector Integration & Hydrogen

⁹ See [here](#) European Aluminium's response to the European Commission's consultation on the Inception Impact Assessment Roadmap for an EU wide Carbon Border Adjustment Mechanism (CBAM).

¹⁰ For policy recommendations, see [here](#) our Aluminium Circular Aluminium Action Plan, May 2020

¹¹ As explained in our consultation response to the draft Sustainable Finance Taxonomy Technical Report, June 2019: "ASI has taken 7 years to build a standard based on consensus among all constituencies and covering a holistic approach to governance, social and environmental performance. This is the most robust and recent set of requirements for the aluminium industry and therefore should be used as guidance: A threshold of 8 CO₂e/ton of Al including scope 1 and 2 emissions, to be met for new smelters from 2020, and by 2030 or earlier for existing smelters". For further information, see ASI's website and proposed methodology [here](#).

the three criteria identified. Also, aluminium recovery from bottom ash treatment and pyrolysis technologies should be taxonomy eligible under the climate mitigation criteria¹².

For further information, please contact:

Sandro Starita

Director Environment, Health and Safety & Sustainability
P +32 2 775 63 61 / M +32 494 52 59 04

Emanuele Manigrassi

Public Affairs Manager
P +32 2 775 63 97 / M +32 4 71 73 53 06

European Aluminium, Avenue de Tervueren, 168 – 1150 Brussels, Belgium



¹² See [here](#) European Aluminium position on the climate mitigation criteria for the EU Taxonomy Regulation