

# 2040 CLIMATE TARGETS PUBLIC CONSULTATION EUROPEAN ALUMINIUM RESPONSE

Brussels, June 2023

## Response to a public consultation

European Aluminium, the voice of the entire aluminium value chain in Europe, welcomes the opportunity to share our views on the European Commission's plans to set EU climate ambition for 2040. Aluminium is at the foundation of transitional technologies needed to reach the ambitious EU's climate targets. As an example, for every MW of solar capacity deployed, 21 tonnes of aluminium are needed. Increasing solar PV capacity from today's 136 GW to 320 GW by 2025 and 600 GW by 2030, as proposed by the EU Solar Strategy, will require an additional 4 and 10 million tonnes of aluminium respectively<sup>1</sup>. Large volumes of aluminium will also be required to produce batteries, electric vehicles, wind turbines, heat pumps and hydrogen electrolyzers. Overall, studies show that to satisfy EU's targets for a fast energy transition, the additional demand for aluminium in Europe will reach 5 million tonnes per year by 2040, equivalent to an increase of 30% compared to Europe's total aluminium consumption today<sup>2</sup>.

Moreover, when compared to other energy intensive industries, the primary aluminium production is already electrified, and Europe's carbon footprint is one of the lowest in the world: since the late nineties, the European primary aluminium industry has decreased its total direct CO<sub>2</sub> emissions by 55%<sup>3</sup>. To go the extra mile and further decarbonise and amplify our efforts to reach climate neutrality by 2050, the aluminium sector needs a comprehensive legislative framework protecting our industry from carbon leakage, incentivising investments in necessary technologies, and setting realistic targets for further GHG emission reductions.

## How to achieve ambitious decarbonisation targets

To be realistic and achievable for our industry, 2040 targets should provide for and be accompanied by:

- **Realistic targets:** the EU must focus on setting achievable and reasonable goals, in the form of:
  - o **Flexible targets:** rather than only focusing on numbers, climate objectives should be accompanied by enabling conditions. Any target needs to be backed by strong support and clear policies, public and large private

<sup>1</sup> For more information on interlinks between aluminium and solar energy, see our paper <https://european-aluminium.eu/wpcontent/uploads/2022/10/european-aluminium-aluminium-in-solar-position-paper.pdf>

<sup>2</sup> KU Leuven, Metals for Clean Energy, 2022, <https://eurometaux.eu/media/jmxf2qm0/metals-for-clean-energy.pdf>

<sup>3</sup> Source European Aluminium, Vision 2050: Today, primary aluminium production in Europe generates about 6.7 kg of CO<sub>2</sub> equiv. per kg; the carbon intensity for aluminium produced in China is three times higher, <https://european-aluminium.eu/blog/vision2050/>

infrastructures deployment, and financial support for investment at pace with scalable commercialization of new technologies. Comparably to other regions of the world, the EU has introduced stringent climate targets along with significant regulatory costs (which our competitors in other regions do not face). We would recommend creating new ones based on science-based assessments of sectorial capacities to decarbonise and accompanying these by a regulatory framework fulfilling the needs of the different sectors to reach them.

- **A reasonably paced ETS:** the ETS is the main instrument used to reduce emissions in Europe, it is currently set on a pace to reach zero emissions before 2040 (taking into account the pace of the linear reduction factor). ETS sectors have considerably reduced their emissions, and without a measured approach to industrial exposure, the level of carbon leakage will increase even further (for example, over the past year, the EU has lost 50% of its primary aluminium production as a result of the energy crisis; this production has been replaced by more carbon-intensive production in other regions of the world, leading to an additional 13 million tonnes of global CO<sub>2</sub> emissions). For us, this pace does not reflect realistically our capacity to decarbonise, there is a risk that setting a higher ambition could cause the EU ETS to exhaust all its quotas at an early stage before emission reduction technologies are fully developed and available at scale. Moreover, the 2040 target should also distribute the burdens and responsibilities more equally across all relevant sectors of our society (industry, buildings, transport, agriculture etc).
- **Ensuring adequate carbon leakage protection:** as it stands, 40% of our primary production costs stem from electricity costs, which are heavily influenced by ETS carbon costs passed on in the power price by electricity producers. Those costs are currently mitigated by the indirect costs compensation scheme, which opens the possibility for Member States to reimburse part of the electricity costs to selected energy intensive industries. If indirect costs compensation was to be completely replaced by the CBAM, EU producers will have to pay these indirect costs, in addition to paying more ETS costs and receiving less free allowances. In total, removing current carbon leakage measures could lead to [a cost increase of 43%](#) in production costs for producing primary aluminium in Europe. In addition, the CBAM remains an untested mechanism, and the risk remains that third country producers will be able to circumvent it via importing downstream products or simply by shifting their green production to the EU. Finally, in support of the green transition towards a decarbonized and circular economy, ETS free allowances should be maintained for aluminium recycling to allow for the growth of new circular economy models.
- **Enough room for a scalable development of carbon dioxide removals:** for hard to abate industries, carbon removal technologies will play a key role in reducing carbon emissions. The principal obstacles for deploying carbon removal technologies are the absence of a suitable regulatory framework, access to storage, good transport alternatives and appropriate financial support. These should be developed in priority to any additional targets. Furthermore, permanent removals should be linked to the ETS. We would propose creating a link between the new carbon removal certification framework and the ETS and allowing for extra allowances to be exchanged against carbon removal certificates.
- **More investments opportunities for hard to abate industries:** Climate targets should be accompanied by investment support for critical value chains. More flexibility should be given to state aid instruments to accelerate investments in recycling and new manufacturing of low carbon and circular metals to supply critical value chains. Aluminium should be included in the Critical Raw Material Act' strategic raw materials list, and all relevant raw materials should be protected through the Net Zero Industry Act. These initiatives should be backed up by financial support for those sectors essential to the green transition in Europe. Boosting investment will allow for greater economic resilience and

increased private-public funding which will in turn speed up the delivery of related projects. European competitive soft funding and risk-reducing mechanisms are necessary to create a level playing field within the EU and beyond and reach climate targets.

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