WHY INCLUDING INDIRECT EMISSIONS UNDER CBAM DESTABILISES EUROPE'S ALUMINIUM VALUE CHAIN AND RAISES GLOBAL EMISSIONS

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The European Aluminium industry strongly supports keeping indirect emissions out of CBAM. If included, it would severely undermine the competitiveness of the entire European aluminium value chain, from smelters to semi producers of rolled and extruded products, as well as remelters, while paradoxically increasing global emissions by shifting production to more carbon-intensive regions. It would also reduce the industry's ability to make long-term investments to further decarbonise its production.

Aluminium is traded globally at a single price set on the London Metal Exchange (LME). Adding indirect emissions would raise aluminium production costs within Europe, penalise European producers while rewarding global competitors who face no carbon cost in their power price, and would be able to send their products to Europe while declaring zero indirect emissions (whereas European producers cannot avoid the indirect carbon cost, even when consuming decarbonised power). Instead of making Europe greener, it would make Europe more dependent on imports and less competitive on the global market for a material essential to clean mobility, renewable energy, and defence, while risking creating significant demand destruction and substitution with other – less circular - materials.

These negative effects would come at a time when the European aluminium industry is investing substantially in reducing its emissions, including by increasing its recycling capacity and capabilities and developing technology for low and zero-carbon production[1]. By exponentially increasing costs and uncertainty for European industry, including indirect emissions to the CBAM scope for aluminium would lead to a double-negative climate impact: increased carbon leakage and global emissions and reduced European industry's capacity to invest in recycling and technologies to cut emissions.

The detrimental impact of including indirect emissions in CBAM for our industry and the climate

Including indirect emissions under CBAM would immediately make European aluminium far less competitive, because it would make European goods more costly to produce than identical goods with identical carbon footprint from outside the EU. Because aluminium is priced globally at the LME, European smelters cannot pass higher electricity-related ETS indirect carbon costs onto their customers. At the same time, competitors outside Europe, whether in China, the Gulf, India or Russia, do not face comparable carbon pricing and would still be able to declare low-carbon electricity for CBAM purposes. ETS indirect carbon costs should not be conflated with indirect emissions under CBAM, as they are two different things. This would create an unavoidable structural disadvantage for European producers, as production falls and imports rise. The easiest way to avoid this is to simply **keep the existing system of ETS Indirect cost compensation (ICC) and indirect emissions out of CBAM.**

The inclusion of indirect emissions from aluminium in the CBAM and the phasing out of ICC would also increase global emissions. The average emission intensity of primary aluminium produced in Europe is approximately 6.5 tCO_2/tAl, which is nearly a third of the global average (16,5 tCO_2 per tonne of aluminium) and three times lower than predominantly coal-based primary aluminium production in third countries, such as China, India and Indonesia[2].

[1] See European Aluminium Decarbonisation Pathways Report (November 2023) and European Aluminium's Innovation Agenda Report (January 2026)
[2] The Direct emissions of primary aluminium smelting range between **1.46 tCO2/tAl to 2 tCO2/tAl**. Indirect emissions instead can range from close to zero (based on nuclear or renewable based electricity) to **15+ tons CO2/t Al**, depending on the carbon intensity of the consumed electricity from the grid (or captive power).

Even if the fundamental mismatch between indirect costs and actual emissions could potentially be resolved, including indirect emissions in CBAM would make aluminium too expensive to process in Europe. Although CBAM is intended to raise the carbon cost of imports, it will unintentionally increase metal input cost for all downstream producers in Europe, an effect that would be significantly amplified if indirect emissions were added to its scope. Due to the specific structure of the aluminium market, prices are driven by the most expensive primary aluminium needed to meet European demand, affecting both imports and domestic purchases of primary aluminium and scrap. As a result, European producers would bear the costs of both the ETS and CBAM, while non-European producers could adjust their inputs and production costs to avoid the border charge and still benefit from higher European prices[3].

Ultimately, this would increase the risk of carbon leakage. Producers in regions without equivalent carbon costs, such as China, the Gulf countries, India or Russia, would not face comparable carbon pricing, while still being able to declare low-carbon electricity for CBAM purposes. As a result, aluminium processing and downstream manufacturing would progressively relocate outside Europe, leaving the EU to import finished aluminium-based products such as cars and aircraft instead of producing them domestically. Consequently, up to 13% of the EU's annual CO_2 reduction effort would be eliminated by the resulting increase in emissions in third countries[4]. As such, it **jeopardises the entire European aluminium industry - the contrary of what the CBAM intends to achieve.**

Finally, adding indirect emissions in the CBAM scope for aluminium would inflate the price of products containing aluminium to such a height that it would result in a strong incentive for end-users to substitute and replace aluminium-containing components with alternative, less circular or heavier materials less exposed to CBAM impact (e.g. steel for automotive or plastic for packaging). In parallel, it would also incentivise imports of finished products to the detriment of Europe-made products. Because primary aluminium entails significant indirect emissions and is globally priced at the LME, including indirect emissions in CBAM would increase costs for downstream producers by nearly 20%. In practice, CBAM would become an additional cost borne only in the EU market. **This could harm domestic aluminium suppliers, downstream customers and reduce demand for highly recyclable aluminium products made in Europe**.

Why ETS indirect cost compensation must be preserved and extended beyond 2030

The indirect cost compensation scheme is an integral part of the ETS and an essential safeguard to preserve Europe's strategic autonomy in a critical material to the twin transition at a decisive time. It is a climate policy *and* carbon leakage protection tool because it supports the competitiveness of a less-emitting European aluminium production base[5] rather than importing aluminium products from high-emitting countries. To date, all countries hosting a primary aluminium smelter except for one have granted or are yet to grant compensation to aluminium producers. This reflects an economic reality: without an adequate ICC scheme in place, an aluminium smelter cannot operate under normal market conditions.

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[3] The price of primary aluminium is set on the London Metal Exchange (LME) and reflects global supply and demand. In import-dependent regions such as Europe, an additional duty-paid premium is added to cover logistics, duties, and border costs for, bringing metal into the regional market. This global benchmark pricing system with regional premiums is unique to aluminium and is influenced by a wide range of factors. CBAM will increase this premium and make downstream aluminium producers bear the costs for both ETS and CBAM. This would eventually lead to such a high price increase that downstream producers will not be able to remain competitive and will eventually relocate.

[4] European Aluminium (2022). *Why including indirect emissions in the CBAM will lead to higher global levels of emissions.*

[5] European primary aluminium production has a carbon footprint that is almost 60% lower than the global average. European Aluminium (2024). *European Aluminium EPR 2024: Executive summary.*

The ETS State Aid Guidelines further support climate action by setting decarbonisation conditionalities for ICC that third competitors' state aid or compensation regimes lack. Firstly, eligible installations are compensated based on *electricity consumption efficiency benchmarks*, ensuring that compensation is adjusted to the sustainability performance of the sector. Secondly, beneficiaries must conduct energy audits and identify and implement highlighted energy-saving opportunities. Furthermore, ICC is conditional on full compliance with EU environmental legislation. Finally, European Member States often request additional green investment or low-carbon energy consumption requirements or conditionalities. For example, compensation is conditional on sourcing a minimum percentage of electricity consumption from carbon-free sources in some countries or on expanding and upgrading site- or near-site renewable energy generation facilities. Accordingly, permitting Member States to allocate up to 25% of ETS revenues to ICC is consistent with the requirement for ETS revenues to be used for climate action.

In conclusion, **as long as aluminium is in the scope of CBAM, a design with closed loopholes confined to direct emissions and complemented by continued ETS indirect cost compensation represents the only approach that avoids counterproductive impacts on competitiveness, investment capacity, and global emissions.**

For more information on European Aluminium's work on CBAM, external studies and memos, please visit the CBAM page of the "Climate and Energy Section" of our Website.