

# Carbon Border Adjustment Mechanism (CBAM)

The Final Blow to European Industry
The Aluminum Industry Particularly Exposed

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### Introduction

Contrary to the stated intention to reindustrialize Europe, the Carbon Border Adjustment Mechanism (CBAM) will harm European industry, **particularly the aluminum sector**. It will **encourage offshoring**, **discourage foreign investment**, and thus contribute to, or even **accelerate**, **the decline of our industrial capabilities**.

It is urgent for Europe to agree to block the implementation of the Carbon Border Adjustment Mechanism (CBAM) for aluminum.

Especially since another policy is possible for Europe, one that would preserve industry while supporting the global decarbonization of the aluminium sector.

### Context: An Existential Crisis for European Industry

European industry is facing a deep crisis, characterized by a decline in industrial production across EU countries: a recession of -2.3% in 2024, including -4.7% for Germany, -3.7% for Hungary, -3.5% for Italy, and -0.3% for France, compared to 2023 (which was already in recession with -3% relative to 2022). For European industry, this marks the third consecutive year of recession after 2022 (-3%) and 2023 (-3%), with factories closing in Europe's leading industrial country, Germany, as well as in France, where the balance between factory openings and closures has turned negative again.

The causes of this crisis are structural and are well explained in the Draghi report: primarily energy costs, administrative complexity, and most importantly, the unpredictability of various production factors.

It is in this context, where many casting foundries, extruders are under threat and numerous automotive subcontractors are at risk, that this new tax is being introduced to the sector.

## Aluminium: A Strategic Metal for Our Industries and an Essential Link in the Climate Transition

Crucial in key sectors such as automotive, construction, aerospace, and packaging, aluminum is listed among the European Union's critical and strategic metals. This metal is expected to play a central role in the climate industrial transition. It helps reduce energy consumption by lightening vehicles, replaces plastic in packaging, and will, alongside copper, be a key enabler for deploying the networks necessary for electrification.

Primary aluminum production in Europe has been severely affected by rising electricity costs for several years, with an acceleration in closures in 2021 and 2022. Less than 1 million tons of capacity remain in the European Union, with 400,000 tons in France. and 190,000 T in Germany (2023) The additional European production is located outside the EU, in Norway and Iceland, at around 2 million tons.

In total, these 3 million tons of capacity face an industrial demand of nearly 7.5 million tons, resulting in a shortfall of more than 4.5 million tons. As a result, Europe is reliant on imports for two-thirds of its needs.

## The Carbon Border Adjustment Mechanism (CBAM): Hell is Paved with Good Intentions

The carbon border adjustment mechanism is presented as a tool that would protect European industries by creating a balanced competitive environment with equal carbon cost ("level playing field").

#### But what is the reality?

At this stage, the CBAM is simply a new tax on imports, which will **degrade the competitiveness of the entire transformation sector**. For aluminum, the measure only targets raw primary aluminum and semi-finished products. Even within this narrow scope, the administrative complexity is such that simplifications are already necessary for industrial players and EU authorities have acknowledged.

How much will this tax cost? No one can say for sure, as it will be proportional to the carbon cost, which itself is unpredictable and is limited to a restricted European context carbon regulatory market when the competition for our industries is global.

#### For European Aluminum Production

The logic behind the CBAM is to deprive producers of their free carbon emission quotas at the same rate as a carbon tax is imposed on imports. In theory, the two elements could balance out, but this introduces significant uncertainty and could even lead to a loss of competitiveness, as the most virtuous global productions will be directed to Europe while relocation of transformation industry outside Europe will deplete demand.

Furthermore, new competitive unit capacity (300 KT per year or more, with a minimum CAPEX of 1.5 to 2 billion euros) will never be built on a tax but on an electrical resource with a guaranteed competitive price over a period of at least 20 years. The failure of U.S. customs policy, which has not attracted any investment in producing primary aluminium despite 10% tariffs since 2018, serves as a reminder of this.

For All Transformation Industries Using Aluminum (Automotive, Construction, Aerospace, Electrical Applications...)

These strategic sectors will be the hardest hit.

The carbon tax applies to imports that cover two-thirds of Europe's primary aluminum needs in raw metal and semi-finished products. It will increase material costs and degrade the global competitiveness of these industries.

The price in the European domestic market will adjust to the emissions of the marginal importer, which could be 2 tons of CO2, resulting in a cost of nearly 200 EUR per ton based on 100 EUR per ton of CO2. This will impose a tax burden of around 1 billion euros per year on these transformation industries, and even 1.4 billion euros as the price of local production will mechanically adjusts to the cost of imports. Indeed, aluminum is an organized market where the price on the European domestic market reflects the cost of the marginal importation that balances supply and demand. Therefore, there is no over-the-counter market, but a local European market premium to be paid on top of the global aluminum price on the LME. This local premium will incorporate the carbon tax paid by the highest emitter importer producer. This market premium will affect all transformers competitiveness as input cost increase will affect all types of aluminium (ingots, semis and even also scrap whose value is indexed on primary premium)

This is thus a massive incentive to relocate transformation chains, as these industries will have an interest in producing outside Europe up to a more advanced transformation stage than semi-finished products.

There are talks of eventually including downstream chains in the CBAM, but no progress has been made in this direction, even though the plan is to start taxing raw aluminum as early as 2026. But let's be realistic, the inclusion of primary aluminum and semi-finished products has already created an administrative nightmare for the affected industries. Downstream, at a further step than semi-finished products, the content and traceability of aluminium content becomes uncertain, and especially, customs codes no longer identify the metal composition of the products. For example, a bicycle, whether made of carbon, aluminum, or steel, has the same customs code. Customs nomenclature would need to be multiplied by a hundred to perform even an approximate task of identifying aluminium

imported in products. Then, there is talk of establishing lump sums—will we consider that a carbon bicycle on average contains 5kg of aluminum?

Finally, it cannot be overlooked that the increase in raw material costs for our industries will be an additional handicap for European exports. On top of the costs of energy, labor, and excessive European regulations, this would be a new blow to exporters

The CBAM thus represents a vital threat to European industry, but would it have a positive effect on global emissions in the aluminum sector?

The answer to this question must be based on three observations:

The first point is that global emissions from the aluminum sector are 70% related to electricity generation (14-20 tCO2 per ton of aluminum for coal generation, 6-10 tCO2 for gas, and 0-1 tCO2 for hydroelectric and nuclear power).

The second point is that European industry, on which this tax is projected to be applied, is already more efficient than the global average, with emissions of 6-7 tons of CO2 per ton of aluminum, compared to a global average of 14 tons. This is thanks to its European electrical system.

The third point is that the global aluminum industry is dominated by China, which produces and transforms about 60% of the global output and emits nearly 70% of the emissions (mostly from fossil electricity, with 75% and even 50% from coal). China has a policy that is the exact the opposite of Europe's: it subsidizes its primary aluminum production (70 billion dollars over 5 years according to the OECD) and bans the export of raw aluminum or semifinished products (export tax) to favor its transformation chains. This strengthens its competitiveness in strategic sectors such as automotive and aerospace, which threaten our industries.

Thus, when considering the global level, Europe's environmental challenge regarding aluminum is not to produce less aluminum by taxing it, but to coordinate our energy policy with our industrial policy to produce more and better, as we are doing today. We do not have the power to shut down Chinese coal plants, but we must have the ambition to replace them by supporting our production.

