

EUROPEAN UNION: THE CARBON TAX AT THE BORDERS IN SIX QUESTIONS

In its fight against global warming, the European Union is about to take an important step: the launch of the operational phase of its Carbon Border Adjustment Mechanism (CBAM). How will it work? Who will be affected? What will be the economic consequences? These questions (and a few others) are addressed below.

In a month's time, the 30th Conference of the Parties (COP) on climate change will be held in Belém, Brazil. With global warming accelerating (the +1.5°C warning threshold compared to the pre-industrial era is set to be exceeded with certainty), the conference will review the "nationally determined contributions" (NDCs) to reduce emissions by 2035, with a higher level of ambition. However, to date, the EU has still not revealed its intentions (unlike Canada, Brazil, Japan and the United Kingdom, among others), even though achieving the 'Fit for 55' target (at least 55% reduction in GHG emissions by 2030 compared to 1990) requires greater efforts¹. It is in this context that the EU-27 are strengthening their measures by introducing a carbon border tax.

WHEN? FOR WHOM?

The 1st of January 2026 will mark the start of the operational phase of the Carbon Border Adjustment Mechanism (CBAM). From that date, and after a long preparatory phase, companies in the European Union (EU) will be required to declare the CO₂ emissions incorporated in their imports of goods (from outside the EU) when these exceed 50 tonnes per year. Introduced by the Omnibus Simplification Act, this threshold effectively exempts small and medium-sized enterprises (SMEs) from the scheme (*i.e.* 90% of the total), which is therefore mainly reserved for large groups. However, the CBAM would not be rendered meaningless: according to European Climate Commissioner Wopke Hoekstra, it would still capture 99% of emissions from the sectors concerned (*see below*). Another relaxation introduced by the Omnibus law is that, whereas the initial scheme provided for the payment of CBAM certificates was scheduled to start in 2026, the deadline has been pushed back to 1 February 2027.

The sectors involved are those whose production activities are the most energy-intensive and account for nearly half of total emissions in Europe. These are steel, aluminium, cement, fertilisers, as well as electricity and hydrogen obtained from fossil fuels (mainly gas).

WHY? HOW?

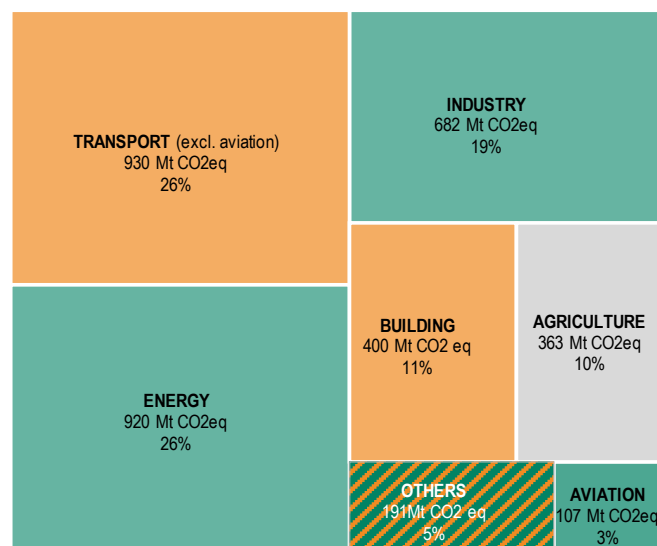
The CBAM has two objectives: to increase CO₂ pricing in the EU in order to accelerate its energy transition, while avoiding carbon leakage, *i.e.* the replacement of products subject to the scheme by imports from countries where emissions are taxed little or not at all.

So far, these leaks have been largely avoided through the distribution of free emission allowances. Nevertheless, the European Emissions Trading System (ETS, more commonly referred to as the carbon market), which is now in its fourth phase, plans to reduce these allowances rapidly, with a view to phasing them out completely by 2034.

EU: GREENHOUSE GASES EMISSIONS BY ACTIVITY

2022, million tons of CO₂ equivalent (Mt CO₂eq.)

■ EU ETS1 ■ EU ETS 2



TOTAL: 3 593 Mt CO₂eq

CHART 1

SOURCE: AEE, OUR WORLD IN DATA, BNP PARIBAS

This could effectively encourage arbitrage in favour of foreign production (offshoring or re-imports). It is precisely to counter this risk that the CBAM was set up. How it works can be understood using simple arithmetic. Given that one tonne of steel produced using conventional methods has a carbon footprint of 1.8 tonnes of CO₂ equivalent (t CO₂eq.)², importing 50 tonnes (the reporting threshold) represents a taxable base of 90 t CO₂eq. (the amount of CBAM certificates to be reported). If a tonne of CO₂ is traded at EUR 100 in the EU but at zero in the importing country, then the border tax will be EUR 9,000. This would make the choice between intra-European and extra-European production financially neutral.

¹ The cumulative reduction in EU GHG emissions between 1990 and 2024 can be estimated at 37.5%. Increasing this to 55% by 2030 would require an average annual reduction in emissions of 5.3% between 2025 and 2030, almost triple the rate of the last ten years.

² Source: Ministry for Ecological Transition.



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ESTABLISHMENT OF A SECOND CARBON MARKET IN 2027: THE ETS 2

From 2027, or 2028 at the latest in the event of "exceptionally high" energy prices, a second carbon market specific to building heating and road transport (ETS 2) will be launched. Important note: under ETS 2, energy suppliers (oil companies, gas and fuel distributors, etc.) will have to declare the CO₂ emissions associated with the sale of their products (in 2027) in order to acquire allowances on the market (in 2028), this time without the possibility of free allowances.

Although not the main players, end consumers (households, etc.) are still affected, as all or part of the carbon tax paid by their supplier may be passed on to them. Ultimately, this creates an incentive to convert heating systems, insulate homes and purchase electric vehicles. However, these are significant expenses (equivalent to four years' income for a modest household in France according to the Pisani-Mahfouz report¹), which are difficult to envisage in the absence of any support system. In this regard, the ETS 2 plans to create a "climate social fund" which would be funded to a level of EUR 65 billion, of which EUR 9.7 billion would be earmarked for France.

¹ Pisani J., Mahfouz S. (2023), The economic impact of climate action, France Stratégie report, May.

BOX

SOURCE: AEE, OUR WORLD IN DATA, BNP PARIBAS

AT WHAT COST? WITH WHAT ECONOMIC CONSEQUENCES?

The CBAM therefore aims to accompany the phasing out of free emission allowances in Europe (and, more generally, the reduction of all allowances) at a cost that a recent study estimated at EUR 35 billion over ten years for businesses³. This rather modest amount (equivalent to 1.2% of the EU budget) takes into account the fact that part of the burden will either be passed on to the end consumer or borne by EU suppliers (China, India, Türkiye, etc.).

These estimates are in line with those of the European Commission, according to which business expenditure would be little affected by the introduction of the CBAM. Insofar as it encourages the substitution of traditional fossil-based solutions (thermal power plants, blast furnaces, etc.) with other, less carbon-intensive but capital-intensive solutions (wind turbines, photovoltaic panels, nuclear power plants, etc.), investment would even increase. The Commission's impact assessment credits it with +0.4 percentage points (pp) by 2030, compared to a counterfactual scenario (without the CBAM and phasing out of free allowances).

The burden of the scheme would mainly be borne by consumption (-0.5 pp by 2030) which, in addition to the CBAM, will also be affected by the entry into force of a second carbon market by 2027 (see box). The impact on European GDP is ultimately estimated at -0.2 pp by 2030, or less than 0.05 pp per year. The loss therefore appears limited, even more so when compared to the cost of inaction. By way of comparison, a study produced by researchers at the European Central Bank (ECB) and the Mannheim Institute⁴ estimates the consequences of the intensification of extreme weather events in Europe (floods, droughts, heat waves) at -0.8 pp of GDP (by 2029).

Given this cost, which is already much higher than that of a carbon tax at the borders, the opportunity to step up the fight against climate change is no longer up for debate.

Finally, the bill could be reduced further if supplier countries themselves adopted an emissions trading system (China has started with its electricity), the prices of which would then be deducted from the CBAM. This hypothesis is not far-fetched. In 2024, the 29th Conference of the Parties (COP), held in Baku, laid the foundations for a genuine global and organised CO₂ emissions compensation mechanism, endorsed by states and supervised by the United Nations⁵. In other words, the decarbonisation effort required of European industries could be more readily accepted now that others are being encouraged to share it.

Created in 2005 with the aim of reducing emissions from the energy and industrial sectors, the European carbon market is about to take on a new dimension. It has worked rather well so far: in twenty years, companies covered by ETS 1 have reduced their CO₂ emissions by 50%, which is well above the European average. By 2030, the target is a 62% reduction (compared to 2005), which means stepping up efforts. The goal is ambitious, but with the introduction of a border adjustment mechanism, the EU is increasing its chances of achieving it.

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³ According to a source cited by the newspaper *Les Echos* on 31/08/2025. See Sandbag (2025), The EU CBAM: A Two-Way Street to Climate Integrity?, August.

⁴ Usman S. et al. (2025), Dry-roasted NUTS: early estimates of the regional impact of 2025 extreme weather, September.

⁵ Proutat JL (2024), "COP 29, beyond the criticism, some progress...", BNP Paribas' podcast *MicroWaves*, December.



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