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Above & Opposite: Biskria

Cement, Algeria, a producer that may be affected by the introduction of the EU ETS Carbon Border Adjustment Mechanism (CBAM). **Source:** Monousos Petrakakis, entrant to the *Global Cement Photography Competition*.

In the third of CemBR's series of articles on the EU Emissions Trading Scheme (ETS), Terry Pavlopoulos looks at the developments in its Phase IV, with a focus on the introduction of the Carbon Border Adjustment Mechanism (CBAM), drawing on findings from CemBR's report: EU ETS & Cement – Enter the Phase IV.

A lthough some non-EU countries are in the process of either considering or implementing carbon pricing schemes, climate policies outside Europe are generally less stringent than the EU Emissions Trading Scheme (ETS). This raises the risk of 'carbon leakage' for those countries covered by the ETS. Carbon leakage would occur if businesses were to shift production outside Europe, for reasons related to climate costs, to countries with fewer emission constraints. Carbon leakage would also occur if products made in the EU were replaced with imports of equivalent but more CO_2 -intensive products.

As the criteria for allocation of free allowances are becoming more stringent and EU decarbonisation targets more ambitious, a new mechanism needs to be in place to minimise carbon leakage. This is the purpose of the Carbon Border Adjustment Mechanism (CBAM).

Intention of the CBAM

The CBAM introduces a levy on EU imports of electricity, cement, iron, steel, aluminium and fertilisers. Its introduction is planned for 2023 and it will be applied in two phases. From the beginning of 2023 until the end of 2025 there will be a transitional phase. During this phase there will be no financial charges, only collection of data. Declarants will report on a quarterly basis the quantity of imports during the previous quarter and the direct emissions of the production process associated with these imports, together with information of any CO_2 price paid in the producing country.

After 2026 it is expected that the CBAM will be fully in place and may be extended to include indirect emissions. At the same time, between 2026 and 2035, free allowances in the EU ETS are expected to be phased out.

When the CBAM is fully implemented, authorised declarants will have to submit an annual



declaration regarding imports of the previous year by 31 May. The declaration will contain the quantity of goods imported, the total embedded emissions and the total number of CBAM certificates to be surrendered, which will correspond to the total embedded emissions.

The administrative burden for importers appears complex and will add to the costs of the levy itself. Part of these costs may be reduced if default emission values are used. However even the 10% worst performers of the EU may emit less CO_2 than some third country producers, which may lead to situations when imported emissions are underestimated. While the purpose of the introduction of the CBAM is to prevent carbon leakage, it is also intended to encourage producers in third countries to adopt more carbon-efficient technologies to produce goods.

Who might be impacted?

Table 1 shows the main countries which exported clinker to EU ETS countries in 2020. Turkey accounted for nearly two thirds of the total non-EU ETS clinker imports. Around 86% of total non-EU ETS clinker imports were from countries in the Middle East, North Africa and the Gulf. Clinker producers in these countries are most likely to be affected when the CBAM is fully implemented.

Country	Clinker exports to EU (Mt)	% of Non-EU imports
Turkey	1.78	65.6
Morocco	0.22	8.2
Saudi Arabia	0.16	5.7
Tunisia	0.12	4.5
Venezuela	0.12	4.4
Colombia	0.09	3.2
Bosnia & Herzegovina	0.06	2.3
Others	0.16	6.0
TOTAL	2.71	100.0

GLOBAL CEMENT: TRENDS

Above- Table 1: Clinker exports to EU ETS countries from non-EU ETS countries (2020). Source: CemBR Research and Analysis / Comtrade.

Below-Table 2: Cement exports to EU ETS countries from non-EU ETS countries (2020). Source: CemBR Research and Analysis / Comtrade. * = Imports may be affected in the short to medium term.

Country	Grey cement exports to EU (Mt)	% of Non-EU imports
Turkey	1.26	39.3
Ukraine*	0.66	20.5
Belarus*	0.44	13.7
Bosnia & Herzegovina	0.20	6.2
Switzerland	0.11	3.5
Vietnam	0.08	2.4
United Kingdom	0.08	2.3
Russia*	0.07	2.2
Others	0.32	9.9
TOTAL	3.22	100.0

Table 2 shows the main countries which exported grey cement to EU ETS countries in 2020. Turkey, Ukraine, and Belarus accounted for nearly 74% of non-EU ETS imports. Switzerland and the UK accounted for 5.8% of cement imports into the EU ETS. Switzerland's ETS is linked to the EU ETS and the UK ETS.

Of course, following the recent geopolitical events and the Ukrainian war, the imports from Ukraine, Belarus, and Russia may well be affected in the short to medium term.

GLOBAL CEMENT: TRENDS



Above: The Breedon Cement Hope Works in Derbyshire, UK. The UK is one of the largest importers of cement in Europe. Source: Global Cement Library.

UK ETS and UK CBAM

In the UK, the Environmental Audit Committee (EAC) launched a public inquiry in September 2021 regarding the potential introduction of a UK CBAM. The EAC requested written submissions by 25 October 2021. Through this inquiry, the EAC is seeking consultation on the role a CBAM could play in addressing carbon leakage while meeting the UK's environmental objectives, and the impact that a unilateral CBAM might have.

CBAM potential implications

The concept of a CBAM is clear, and it is intended to address carbon leakage. In addition, it is intended to encourage exporters of cement based outside the EU ETS to reduce their CO_2 footprints. However,



over and above the previous considerations, there are two main uncertainties surrounding the CBAM, both in the EU and in the UK.

The first is around the way CBAM is going to be implemented. There are no details of how the system is going to work, for e.g., how would the declared CO_2 emissions of an exporting plant be verified? So, there are several operational details that must be ironed out before the CBAM can be implemented. This may be the reason behind the 2026 date for full implemention of the CBAM.

This leads to the second issue with the EU CBAM. The start date for the EU CBAM is a full four years away from now. The question is what will happen between 2022 and 2026 in the European trading environment? The increasing stringency of the EU ETS Phase IV coupled with the absence of a CBAM may put the European producers at a competitive disadvantage vis-à-vis non-scheme exporters.

Clearly, this depends on the behaviour of non-scheme exporters to Europe. Will they go for increasing market share? Will they keep volumes at 2019-2020 levels and increase prices? This is a complicated question, and indeed it is not only dependent on CO_2 costs, but also on fossil fuel costs and supply-demand tightness. These are hard to predict at the best of times.

In theory, the delay of the CBAM's implementation cannot be viewed as good news by the European manufacturers, as the 'level playing field' envisaged by the CBAM architects cannot materialise until 2026.

For the UK, which is one of the largest importers of cement in Europe, the implementation of a CBAM would not have a major impact if the nature of importers remains the same as in 2020. In that year, the UK imported around 2.24Mt of cement, almost all of it from a EU ETS member countries. So, in as much as the importers' profile remains unchanged and the price discrepancy between EU ETS and UK ETS carbon credits pricing stays within a small range, the delay of the CBAM may not affect the British producers as much. However, this may not be the same if the nature of importers changes. In other words, if the UK begins to import from non-EU ETS members, for example Turkey. This is an interesting consideration, and of course it depends on the importing facilities of the UK itself. ٩

Right: The CBAM is a key ingredient in the EU ETS' route to lower CO₂ emissions across the EU. **Source:** Shutterstock.com.