

October 2021

REVIEW OF THE EU EMISSION TRADING SCHEME

CEMBUREAU POSITION

EXECUTIVE SUMMARY

- ✓ CEMBUREAU supports the review of the Emission Trading Scheme (ETS) to align it with an increased climate ambition. The reform is important to provide the right market signals to enable the industrial transition, which will require significant investments from the European industry. With this in mind, we highlight in this paper a number of key aspects that are essential to strengthen the draft ETS Directive.
- ✓ The increase of the Linear Reduction Factor (LRF), the re-basing of the cap and strengthened benchmark rules will put considerable pressure on the industry, and further accentuate carbon leakage in the sector. In this respect, CEMBUREAU supports the introduction of Carbon Border Adjustment Mechanism (CBAM). We however believe that it is indispensable to improve some key parameters of the CBAM proposal – ensuring it fully equalises CO₂ costs between EU and non-EU suppliers through a watertight mechanism that includes indirect emissions and a solution for exports – before any phase-out of free allocation is initiated.
- ✓ ETS revenues should be used to unlock investments in breakthrough technologies such as Carbon Capture, Use and Storage (CCUS), which plays a pivotal role in the cement industry. Whilst the increase of the ETS innovation fund and the introduction of Carbon Contracts for Difference (CCDs) are welcomed, it is imperative that clear accounting rules are put in place to incentivise the re-use of CO₂. As things stand, the draft Directive would significantly constrain the potential of CCUS technologies and emissions reductions.
- ✓ The use of non-recyclable waste and biomass waste is a key lever to reduce emissions in cement production. Going forward, it is key to include waste incinerators in the EU ETS so that they are faced with similar climate requirements to those of cement kilns. In addition, the expansion of carbon pricing to other sectors such as road transport and buildings is necessary, but these sectors should be placed in a separate scheme, as suggested in the legislative proposals.

1. Introduction – the European cement industry and the EU ETS

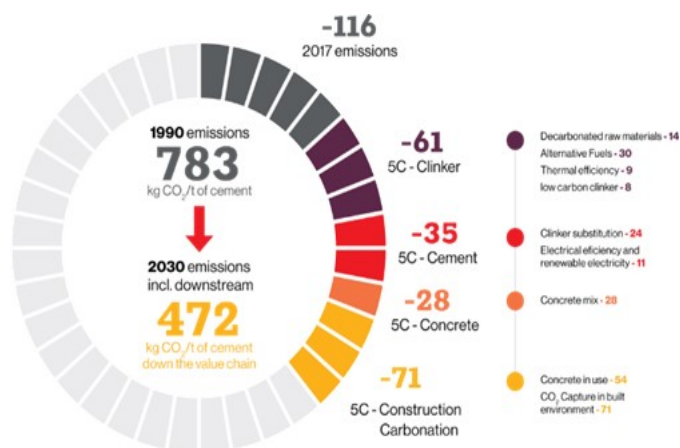
Decarbonisation pathways in the European cement industry

The European cement industry fully supports the objectives of the European Green Deal. Cement is a key enabler to a carbon neutral society through its end-product, concrete, which is a key component for renewable energy and public transport assets, and the material of choice for sustainable buildings and infrastructure of tomorrow.

Today, the European cement industry accounts for 7% of the carbon permits traded on the EU ETS, and over 200 cement plants are covered by the scheme throughout the EU. Since 1990, the cement sector has reduced its CO₂ relative emissions by about 15%.

In May 2020, CEMBUREAU published its [Carbon Neutrality Roadmap](#) setting out its ambition to reach net zero GHG emissions along the cement and concrete value chain by 2050. The roadmap sets out in detail the technological pathways to reach net zero GHG emissions along the cement and concrete value chain by 2050.

At a 2030 horizon, the roadmap anticipates a reduction of gross CO₂ emissions by 30% for cement and 40% down the value chain compared to 1990. As summarised in the attached chart, emissions reduction happening between now and 2030 will be largely based on existing technologies such as improvements to the thermal efficiency of cement kilns; replacement of fossil fuels by non-recyclable waste and biomass waste; use of decarbonated raw materials; lower clinker-to-cement ratios as well as increased electrical efficiency. Whilst carbon capture is expected to come into commercial use mainly after 2030, it is important to note that many CCUS pilot projects and demonstrators in development and will be in operation in the current decade. Going forward, CCUS is indispensable to achieve carbon neutrality in the cement industry.



The cement industry is exposed to carbon leakage and this exposure will increase under an increased EU GHG reduction target

Under the current EU carbon prices, the EU cement industry’s CO₂ costs amount today to about 8-10% of our total production costs, despite free allocation under the EU Emission Trading Scheme (ETS)¹. Such high share of CO₂ costs is very challenging at a time no other cement company outside Europe is exposed to such costs.

EU cement imports from non-EU countries have increased by 160% over the past five years (2016-2020), and by 25% in 2020 alone – with significant spikes in the countries which are exposed to international trade routes. CEMBUREAU’s own analysis shows that carbon leakage in the cement industry will be exacerbated over the coming years, despite the existing carbon leakage protection measures such as free allocation (please see [CEMBUREAU position paper on CBAM](#)). It is therefore indispensable that the existing carbon leakage measures are strengthened through the introduction of a CBAM.

2. EU ETS Review – views from the European cement industry

CEMBUREAU welcomes the proposed EU ETS review. It is however clear that such reform will put significant pressure on industrial sectors. We also wish to highlight that that the ETS has been reviewed numerous times in recent years: going forward, and in light of the cement industry’s decarbonisation agenda, it is key to ensure that the coming reform is long-lasting and provides a stable legal framework for investments. We highlight below a number of key aspects that should be strengthened in the Commission proposal.

¹ [Please see CO₂ Costs in cement production – calculations, CEMBUREAU](#)

a. The EU ETS review will put significant pressure on industrial sectors and any change to free allocation rules should be introduced carefully

As explained above, the European cement industry is exposed to CO₂ costs which are faced by virtually no other cement plants outside Europe. This trend will inevitably be exacerbated by the proposed revisions – both because carbon prices are expected to go up as a result of an increased LRF and re-basing of the cap, and because of the tighter benchmark rules.

ETS free allocation should not be phased out before CBAM equalises CO₂ costs and is fully watertight, operational and tested

CEMBUREAU supports the introduction of CBAM. It is however indispensable to ensure that CBAM effectively equalises CO₂ costs between EU and non-EU suppliers before any phase-out of free allocation is initiated. As explained in [CEMBUREAU's position paper on CBAM](#), some key parameters of the Commission proposals must be improved to:

- Ensure a full CO₂ cost equalisation by strictly mirroring the carbon costs faced by EU suppliers;
- Develop a watertight monitoring and reporting system for measuring embedded emissions and avoiding circumvention;
- Include indirect emissions and give due consideration to transport emissions, thereby mirroring the CO₂ cost structure of EU producers;
- Include a solution for EU exports to avoid a situation where CBAM would result in lower access to export markets for the European industry, with a negative impact on global CO₂ performance.

CBAM sectors would indeed be exposed to considerable risks if free allocation is phased out at a time the mechanism has not demonstrated its effectiveness. In addition, such phase-out would cause risks of market distortions between CBAM and non-CBAM sectors, and have a devastating impact on European industries should no solution be found on exports. Last but not least, CBAM and ETS free allocation are not strictly comparable and interchangeable measures, as EU producers are subject to the carbon costs for their entire production, while importers would be subject only for the quantities exported to the EU.

Such gradual and 'de-risked' implementation of CBAM should be further supported by an early introduction of CBAM during a transition phase, where the instrument would co-exist with ETS free allocation at current level. This transition phase would ensure that CBAM's design is fully watertight and that the mechanism effectively achieves CO₂ cost equalisation. Such co-existence between free allocation at current level and CBAM is legally possible and does not pose risk of 'double protection', given the way CBAM is currently designed². Any subsequent reduction of free allocation should be done gradually and in parallel with an effective equalization of CO₂ costs through an effective CBAM, along the lines set out above.

For the reasons highlighted above, CEMBUREAU wishes to emphasise the importance of having both the CBAM Regulation and the reviewed ETS Directive examined in parallel by the EU institutions.

Any conditionality rules on the attribution of free allocation should be handled carefully

CEMBUREAU notes that the proposed Directive introduces new conditionality rules for the attribution of free allocation based on the implementation of energy efficiency audits. Energy efficiency is a no-

² CEMBUREAU has commissioned several legal opinions on the topics, that concluded that WTO law does not per se prohibit such co-existence of CBAM and free allocation, provided that an appropriate methodology is used to calculate the exact scope of CBAM measures so as not to overlap with the coverage of ETS allowances. In other words, as long as the level of free allowances for EU producers is taken into account for the determination of the level of a CBAM, there can be a co-existence without a risk of double protection.

regret option and an integral part of the cement sector's climate ambition, but we would like to highlight a few concerns with this approach:

- The EU ETS offers a market-based approach to emission reductions, whereby the cleanest plants are rewarded through a lower number of allowances to be surrendered – whilst more polluting installations are required to purchase more allowances³. The principle of conditionality goes against this idea of a market-based system.
- The idea to tie such conditionality to energy audits may have unintended consequences. In the case of cement, the vast majority of the CO₂ emitted does not come from energy usage but from process emissions.
- A conditionality approach applying individually to each installation prevents companies with different sites across the EU to focus their decarbonisation investments on some specific plants – as is needed when implementing breakthrough technologies such as CCUS.

b. The ETS review should unlock investments in low-carbon technologies and provide a proper business case for CCUS

CEMBUREAU strongly believes that the upcoming review of the EU ETS is a key opportunity to support the early deployment of breakthrough technologies, such as CCUS.

The EU ETS should support investments in low-carbon technologies through innovative financing mechanisms

As explained above, technologies such as CCUS are essential to allow for deep CO₂ cuts in key sectors like cement, but are expected to be commercially deployed from 2030 onwards. It is important to accelerate their deployment, both to ensure that the EU preserves its industrial leadership, and to allow for deeper CO₂ cuts in a shorter timeframe.

In this respect, we welcome the inclusion of Carbon Contracts for Difference (CCDs) into the Directive, the reinforcement of the ETS innovation fund, as well as the requirement for Member State to use ETS revenues primarily for climate purposes. We note that the draft ETS Directive suggests that the free allocation no longer provided to the CBAM sectors will be auctioned and that the revenues will accrue to the Innovation Fund, where “special attention should be given to projects in CBAM sectors”. We find it imperative to strengthen this provision and clarify that the revenues generated by CBAM and the phase-out of free allowances will support the decarbonisation of CBAM sectors only.

The EU ETS carbon accounting rules should not disincentivise carbon utilisation

CCUS is critical for the cement sector's transition towards carbon neutrality, accounting for 42% of the industry's CO₂ emissions at a 2050 horizon (please see CEMBUREAU's [Carbon Neutrality Roadmap](#)). The demonstrators and pilot projects launched by the industry demonstrate both CCUS' effectiveness to capture CO₂ emissions from cement manufacturing, and also the variety of CO₂ usages that could be made beyond geological storage. Today, a significant number of pilot projects on CCUS are indeed deployed in the European cement industry across the EU, looking at re-using CO₂, either through mineralization (permanent capture of CO₂ through carbonation) or other types of use (for instance, as synthetic fuel through the blending with hydrogen, or for chemical purposes). These innovative uses of CO₂ will also support the decarbonisation of other industries.

The ability to deduct emissions which are captured and then re-used in carbon-based products is of crucial importance to allow such innovative uses to take up. Indeed, the business case for a capture investment (which represents a major investment for any cement kiln) depends on the avoidance of CO₂ costs for the CO₂ captured, whilst the possibility to deduct the CO₂ captured allows the plant to claim CO₂ emission reductions and therewith contribute to the overall emission reduction objective.

³ Such approach also applies in the case of free allocation, where only the installations under the ETS benchmark receive fully the number of free allowances needed to cover their production.

The proposed ETS Directive endangers this business case through a very narrow definition of the notion of “emissions” and, consequently, the exemption from the obligation to surrender allowances, which would be restricted to (i) permanent geological storage and (ii) the CO₂ chemically bound in a product. In addition, the omission of the requirement that CO₂ should be “released in the atmosphere” for there to be an “emission” may create legal uncertainty on the possibility for the capturing plant to deduct the captured CO₂ from its emissions.

CEMBUREAU does not deny that some CO₂ utilisation projects – such as the use of CO₂ in synthetic fuels – need a serious debate on carbon accounting, since the captured CO₂ can eventually be released when used (for instance, by the airplane when consuming the synthetic fuel). However, we are concerned that the draft Directive altogether endangers the business model of carbon utilisation, on very fragile legislative grounds.

Based on the above, CEMBUREAU would like suggest that the revised ETS Directive reconfirms that there is an emission of CO₂ only if and at the point of release into the atmosphere. A transfer of CO₂ to a third operator does not result in an emission for the transferring plant. The ultimate use of CO₂ should not be the determining factor in allocating the CO₂. In addition, CEMBUREAU believes that consideration should be given to the accounting of negative emissions through the use of Bioenergy with Carbon Capture and Storage (BECCS).

c. Waste incineration should be included on the EU ETS

CEMBUREAU strongly believes that waste incineration should be included with the other energy intensive sectors within the existing ETS.

Today, the European cement industry is a large user of waste and by-products utilizing approximately 36 million tonnes per year. In the EU in 2020, the sector substituted on average 50% of its fossil fuel consumption with non-recyclable waste derived fuels. Within a cement kiln waste fuels are co-processed utilising the heat value from the waste fuel to substitute fossil fuels and incorporating the ash as a partial replacement of the raw materials, leaving no waste residue. In addition to providing sound solutions for some waste streams and strengthening the circular economy, this use of waste fuels and waste biomass fuels are also key for the cement industry to reduce its CO₂ emissions (please see our [carbon neutrality roadmap](#) for more information).

The inclusion of waste incinerators in the EU ETS is therefore critical to create a level playing field between cement kilns and incinerators in terms of access to waste. It will also bring significant climate benefits by helping to correct the unfair competition with other energy producers which are covered by the EU ETS, and put a price on the use of waste to create energy, just like is currently done in the European cement industry.

In addition, CEMBUREAU generally supports the idea of expanding carbon pricing to other sectors. However, sectors like road transport or heating in buildings have price elasticities that vastly differ from the sectors covered by the current EU ETS. CEMBUREAU therefore believes that an expansion of carbon pricing to road transport and buildings should be done through a separate ETS where the cap can be adjusted to ensure they achieve the necessary GHG emissions reduction, as proposed in the draft Directive.
