

OFICEMEN'S DRAFT ANSWER TO PUBLIC CONSULTATION ON "CARBON BORDER ADJUSTMENT MECHANISM"

Spanish Cement Association (OFICEMEN), is grateful for the opportunity to provide inputs on Inception Impact Assessments about the Carbon border adjustment mechanism that the Commission published on the 4th of March and is open for feedback for 4 weeks.

CORE IDEAS

- OFICEMEN welcomes the idea of a carbon border mechanism as a unique opportunity to enable the industry to help deliver the EU's carbon neutrality objectives and drive deeper CO₂ emissions' cut in the EU and beyond.
- The European cement industry already faces a strong risk of carbon leakage despite the partial free allocation provided under the EU Emission Trading Scheme (ETS). This risk is increasing at a very fast pace, as third countries which are not subject to the same z constraints build up their export capacity to the EU.
- If designed properly, a carbon border mechanism could create the level playing field the industry needs to deliver low-carbon investments and move towards carbon neutrality along the value chain. It could also incentivise third countries to step up their efforts on climate change and ensure that the EU does not "outsource" its CO₂ emissions through the import of more CO₂-intensive products. Considering the EU's renewed carbon ambitions, we therefore see the timely development of adequately designed carbon border mechanism as central to the European Green Deal.
- It is imperative that any carbon border mechanism co-exists with free allocation under the EU ETS, at least until the end of Phase IV. The replacement of the existing carbon leakage measures by an untested mechanism would create considerable uncertainty and risks for investments in the EU, at a time the industry needs a predictable framework to deliver low-carbon investments.
- The core objective of a carbon border mechanism should be that an importer to the EU market faces the same CO₂ costs as an EU domestic producer. OFICMEN suggests some design principles which (1) are fair and transparent for both EU and non-EU producers, (2) will have a positive impact on climate worldwide, and (3) will avoid carbon leakage and imported CO₂ emissions.



1. Background

OFICEMEN is determined to contribute strongly to the EU's vision for a carbon neutral society by 2050 and support the objectives of the European Green Deal.

The European Green Deal recognizes that the cement industry is indispensable to Europe's economy, as it supplies several key value chains. As key construction materials for renewable energy equipment, sustainable buildings and mass transit transport, cement and concrete indeed offer the opportunity to accelerate the creation of a carbon-neutral Europe.

The "Masterplan for Energy-Intensive Industries (EIIs)", an outcome of work of the High-Level Group on Energy-intensive Industries, sets that the legal framework for products should bridge the current situation with the development of future markets without creating distortions or competitive disadvantages. During the transition, continued support for energy intensive industries (such as cement industry) should safeguard competitiveness and investments in Europe. This process requires a smart combination of offensive and defensive market creation strategies in order to maximize the benefits for EU's economy and society.

The cement industry is a key enabler to a carbon neutral society through its end-product, concrete, that is the material of choice for building the renewable energy assets (including wind turbines and hydro-electric dams), and the sustainable buildings and infrastructure of tomorrow. The cement industry is local (from raw material to end-product), present across the EU territory, and plays an important role for both the EU social cohesion and the wider economy.

With 27% CO₂ emission reductions achieved in the Spanish cement manufacturing since 1990, the cement industry is on track to achieve its 80% emission reduction target by 2050, using conventional technologies and the successful deployment of carbon capture and storage/use¹. OFICEMEN and CEMBUREAU, the European cement association, are currently in the process of reassessing these targets with a view to setting out the cement and concrete's industry's pathway to achieve carbon neutrality along the value chain in Europe by 2050².

Already today, the European cement industry deploys a wide range of technologies and innovation projects at every step of the cement production process. These include the development of alternative fuels to replace fossil fuels in heating processes³, improved energy efficiency of kilns, low-clinker cements, innovative binders, innovative concrete solutions, up to the development of carbon capture and storage/use technologies where the industry is leading the way through several pilot programmes in Europe.

The cement sector's efforts to reduce its environmental footprint and support a carbon neutral economy are further explained on our Low-carbon economy website.

¹ Please see <u>The road map for reducing carbon emissions by 2050</u>, OFICEMEN and <u>The role of CEMENT in the low carbon economy</u>, CEMBUREAU

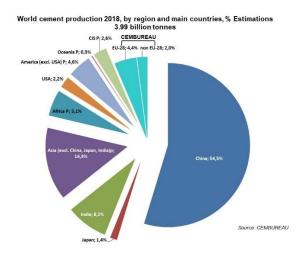
² Please see press release <u>European cement industry strives for carbon neutral cement and concrete along the</u> value chain by 2050.

³ The European cement sector is a global leader in the use of alternative fuels to replace fossil fuels which now account for 46% of the total energy mix. The alternative fuels are drawn from a variety of non-recyclable waste streams which puts the cement industry at the heart of the circular economy and makes it a major actor in the waste management policies at EU and national level.



2. Cement sector has a high exposure to carbon leakage

In 2017, the cement production of the current 28 Member States of the EU was 175.1 million tonnes, about 4.3% of the total world production (4.1 billion tonnes). There are over 200 installations in the EU, and the cement industry directly employs over 35,000 persons in the EU.



Despite partial free allocation under the EU ETS, the European cement industry faces high risks of carbon leakage, which needs to be addressed urgently

Cement is traded on European and world markets either as final product or as clinker. Clinker is the CO₂-intensive part of cement. It is formed through the calcination of limestone into lime, and then through a reaction with the other constituents of the raw materials at temperatures of 1450° C (including e.g. clay, shale) to form clinker.

Already today, the European cement industry faces a significant risk of carbon leakage, both at the EU's land borders and ports through the low price of long-distance shipping and waterway transport, which potentially allows large imports of cement or — much more often - clinker from countries not covered by the EU ETS (or by systems with equivalent rigour). This risk of carbon leakage has been partly recognised by EU policymakers in the EU ETS scheme through the free allowances mechanism, which is designed to provide a degree of protection to the European industry.

Studies led by market analysts and external consultants show that, despite free allocation, the European industry is at a high-risk of carbon leakage.

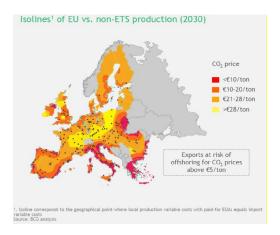
The rules for the calculation of free allocation have indeed been reviewed for the phase IV of the EU ETS (2021-2030), with a reduction of both the Historical Activity Level (HAL) and the emission factor benchmark. As a result, it is expected that, as early as 2021, free allocation will be insufficient to meet EU demand for clinker and normal export activity, resulting in a free allocation shortage. The shortage of free allowances will translate into increased production costs for clinker production. At a CO₂ price of €28/tonne, each marginal tonne of clinker produced in the EU above the level of free allowances will increase its production cost on average by €23/tonne of clinker during the period 2021-30.

Because of these increased production costs, clinker produced in non-ETS countries will become increasingly competitive, if these countries do not incur the same level of CO₂ costs. In this context, producing locally in the EU (and paying the CO₂ related cost) will be less competitive than importing



from non-ETS offshore locations (with the additional cost of transporting the product to the EU). The impact will be felt across Europe. It will be particularly strong in regions which are more exposed to clinker and cement trade, due to their location at the EU's land borders, or their proximity to key sea shipping routes (please see map below).

For CO₂ prices of €28/tonne, in line with Commission expectations, the expectation is that Phase IV will lead to a risk of offshoring 40 million tonnes of EU clinker production by 2030 (equivalent to >20% of EU demand). For CO₂ prices of €72/tonne, 58 million tonnes of EU clinker production will be at risk of offshoring by 2030. Because of production offshoring, emissions will not decrease at a global level, but rather be displaced and increased due to the additional direct and indirect emissions, as well as increased transport emissions. Such offshoring would also have significant social and economic impacts.



3. Competition is sharply increasing at the EU's doorstep

This risk of carbon leakage is further heightened by recent trends observed in the EU's neighbouring markets:

 Installed capacity is rising at the EU's doorstep: the build-up of 70 million tonnes of integrated new capacity is taking place between 2018 and 2025 in countries surrounding the EU, and part of that could be exported to the EU market.

Thus, for example, EU market is under increasing pressure from major cement producing countries of the Mediterranean basin and which are not subject to regulation on CO₂ emissions. Turkey has doubled its cement exports from 2016 to 2019 and Algeria has increased them exponentially:

	Development of Cement exports (Mt) ⁴				
	2016	2017	2018	2019 ⁵	
Algeria	0	0	0.5	2.5	
Turkey	11.4	12.9	13.8	22.1	

⁴ The Global Cement Report. Edition XIII (2019); Tradeship Publications

⁵ Forecast of The Global Cement Report. Edition XIII



These countries are ready to continue increasing their cement export. Investment increasing in cement plants new capacity has been developed in the last years, offering an over-capacity in all the Mediterranean area. This over-capacity represents approximately 50% of EU cement market. The gap between domestic consumption and cement capacity is shown in the following table:

	Cement capacity (Mt)	Domestic consumption (Mt)	Export capacity (Mt)
Algeria	38.4	25.16	13.24
Turkey	141.0	46.93	94.07

- These countries do not face the same constraints on carbon emissions as European cement producers, increasing the threat to the competitiveness of the European cement industry.
- In combination with the aforementioned increased capacity, there is a sharp drop in cement demand in Middle-East/Northern Africa (-10% in Algeria and -5% in Libya and Egypt). This will heighten the risk of exports to the EU.

An example of this risk the spectacular increase imports into the EU during 2104-2018

	Import			
Country	2014	2019	Variation	% variation
Turkey	1,074,436	1,988,669	914,232	85%
Ukraine	17,420	571,055	553,635	3,178%
Belarus	179,063	450,409	271,347	152%
Algeria	20,516	288,188	267,671	1,305%
Morocco	23	243,735	243,712	1,050,481%
Bosnia and herzegovina	95,866	241,553	145,687	152%
Tunisia	16,251	155,896	139,645	859%
Albania	32,040	168,267	136,227	425%
NORWAY (incl.SJ excl.1995,1996)	51,606	164,638	113,032	219%
Saudi Arabia	1	110,530	110,529	11,052,890%
United States	125,010	2,029	-122,981	-98%
Vietnam (excl. North -> 1976)	270,923	121,014	-149,909	-55%
Total	2,470,054	5,164,405	2,694,350	109%



• In parallel production facilities in the EU continue to be closed. According to the EU registry report "Verified emissions 2018"⁶, in 2013 there were 248 integral cement plants, since then 32 (13%) have closed and 12 (5%) have not been operating during 2018. That represents 18% less of cement plants, even though the European market has grown a 10% between 2013 and 2018⁷.

	Open			Closures	
Country	Total	Operative in 2018	Non operative in 2018	from 2014 and beyond	Total
Luxembourg	1	1			1
Austria	9	8	1		9
Belgium	4	1	3		4
Bulgaria	3	0	3	1	4
Cyprus	1	1			1
Czechia	5	5			5
Germany	36	36		1	37
Denmark	1	1			1
Estonia	1	1			1
Spain	33	32	1	3	36
Finland	2	2			2
France	32	31	1	2	34
United	12	12		2	14
Kingdom	_				
Greece	6	6		2	8
Croatia	4	4			4
Hungary	3	3		2	5
Ireland	4	4			4
Italy	22	20	2	18	40
Lithuania	1	1			1
Latvia	2	2			2
Netherlands	1	1			1
Norway	2	2			2
Poland	9	9		1	10
Portugal	6	6			6
Romania	7	7			7
Sweden	3	3			3
Slovenia	2	1	1		2
Slovakia	4	4			4
Total	216	204	12	32	248

Cement installations in the EU registry report "Verified emissions 2018"

• Furthermore, several land corridors with China are currently being developed through the Belt and Road initiative. One of the corridors is China-Eurasia, the goal of which is to accelerate

⁶ https://ec.europa.eu/clima/sites/clima/files/ets/registry/docs/verified emissions 2018 en.xlsx

⁷ Source: The Global Cement Report[™] - 13th Edition



railway trade between China and Europe via Brest-Litovsk (Poland/Belarus border). This effort to connect with markets such as Turkey and Belarus are seen as a prelude to a phase in which China will begin acquiring assets in Europe.

• Last but not least, the last few months have witnessed the development of modular grinding plants in the EU, allowing clinker to be imported from outside the EU and grinding to cement taking place in the EU.

In conclusion, the European cement industry faces a risk of carbon leakage that is already underway, despite the partial free allocation of allowances under the ETS. In the absence of a level playing field, it is likely that the EU industry will continue to be at a competitive disadvantage, resulting in increased market shares of less CO₂-efficient cements and risks of factory closures, with consequent social implications, across the EU. This competitive disadvantage will further increase as the EU implements ambitious CO₂ reduction policies as part of the European Green Deal, unless similarly ambitious policies are set up by third countries. It is therefore critical and urgent that a carbon border mechanism is put in place.

4. An EU Carbon border mechanism could play a decisive role in building a level playing field on carbon emissions

OFICEMENconsiders that an EU carbon border mechanism can play a decisive role towards both domestic and international action on climate change:

- A well-designed mechanism would allow the creation of a level playing field between the European cement industry and third countries producers', ensuring that they pay the same carbon price to place products on the EU market and that they compete on the same carbon price base when placing products internationally. It should thereby prevent carbon leakage, and ensure the European industry competes on an equal footing with third country producers when delivering investments to reach carbon neutrality;
- An EU carbon border mechanism would support the EU's efforts to foster climate ambitions in third countries and thereby lead to deeper carbon emission reductions worldwide. Third country producers will be incentivised to reduce their carbon emissions; and third country governments will be encouraged to set up domestic carbon pricing schemes with equivalent vigour to the EU system;
- In designing a carbon border adjustment and reaching out to third countries to address their programs for emission reductions, appropriate attention needs to be paid to already existing agreements or arrangements with these third countries such as a customs union, a linking arrangement, a trade or association agreement. If some third countries already have certified bodies in place, recognised by the EU, that can assess the emissions levels of plants in third countries, this can be a facilitating factor in the application of the mechanism.
- A carbon border mechanism would also offer a long-term signal to investors across the EU, thereby supporting the upscaling of low-carbon technologies;
- Last but not least, revenues generated by the carbon border adjustment could also be used to foster research and deployment of low-carbon technologies in Europe.

However, these expected benefits will largely depend on the design of such carbon border mechanism.



5. OFICEMEN proposals for an effective and fair an effective and fair mechanism.

A variety of models have been discussed for carbon border mechanisms. OFICEMEN considers that the objective of any mechanism is that it should result in EU producers and third country importers paying the exact same price for the carbon emissions they emit.

OFICEMEN, in cooperation with CEMBUREAU, has developed five key design principles for such instrument, which are listed below.

<u>Principle 1: In an initial phase, an EU carbon border mechanism must be complementary to the EU ETS free allowances</u>

In an initial phase corresponding to phase IV of the EU ETS (2021-2030), OFICEMEN considers that the instrument should take the form of a carbon adjustment mechanism, and be complementary to the EU ETS. An adjustment charge should be applied to third country imports to ensure that importers face the same carbon price than EU producers under the ETS. This adjustment charge should be fair and consider the free allowances received by the European industry.

As explained above, energy-intensive industries such as cement already face a shortfall of allowances under the ETS rules, increasing the production cost and the risk of production being offshored. In this context, the introduction of a cross border mechanism combined with an immediate loss of free allowances would create considerable uncertainty and risks.

Besides, having a carbon border mechanism set up while maintaining free allowances for EU producers during an initial phase provides distinct advantages:

- It would provide a stable framework for low-carbon investments to happen. The industry has taken the current EU ETS Directive (adopted in 2018) as a basis for long-term investment decisions, including for investments needed to decarbonise the sector in the coming years. This legal certainty would again be put into question by the introduction of a cross border mechanism which would, for EU producers, impact the free allowances system, before the expiry of EU ETS Phase IV;
- It allows the level of free allowances received by EU producers to be taken into account in the setting of the adjustment paid by importers; thereby starting with a smaller amount. This is ideal for a testing phase, given the many uncertainties surrounding the implementation of a carbon border mechanism (WTO compatibility, trade retaliations...);
- It minimises distortions of competition between different sectors which are covered by the EU ETS.

Furthermore, it is important to underline that the existing system of free allowances was adopted in order to address one specific type of carbon leakage, namely the offshoring of a number of sensitive industries from the EU to countries with less stringent carbon costs. Addressing emissions in imports, which is also essential to prevent carbon leakage, is not tackled by the current ETS carbon leakage measures. This is why the two carbon leakage policies – ETS designed with free allowances on the one hand, and a carbon border adjustment to reduce third countries' emissions on the other hand – should be viewed as separate and evolve independently of each other, as opposed to being seen as "alternatives" to each other.



OFICEMEN believes it is perfectly possible to design a mechanism that takes into account the free allowances received by the European industry to determine a fair adjustment charge for importers. The adjustment paid by importers would simply be reduced to consider free allocation, including the fact that free allocation would reduce over time (e.g. through a cross-sectoral reduction factor or to meet the new 2030 target).

<u>Principle 2: A carbon border mechanism must be based on verified emissions from importers to</u> the EU, not 'average emissions'. It should include indirect emissions.

For any mechanism to be successful and fair, it is important that it is based on actual and verified emissions. This is particularly crucial in the case of cement, where various types of cement with different carbon intensity can be produced.

Third country producers' emissions could be determined in a two-step mechanism:

- Third country producers would use an EU-accredited certification body to determine the CO2 content of their product;
- If a third country producer fails to produce such certified document, the CO2 content of their product would be based on a corrected average CO2 emission value for the clinker/cement produced in the exporting country, for instance taking the worst 20th percentile. This would incentivise third country producers to be transparent on their emissions. Recognition would be made for third country CO₂ emissions schemes and these would be factored in when determining the CO₂ charge for imports from the third country.

In addition, the adjustment mechanism should also include costs associated with indirect emissions. The European cement industry is indeed exposed to significant indirect costs, which are foreseen to rise in the future (e.g. following the electrification of production processes and introduction of CCS). It is therefore fair that importers face the same costs.

<u>Principle 3: A carbon border mechanism must follow a very transparent methodology and be</u> fully WTO-compatible

To create a predictable framework for low-carbon investments (new technologies, equipment and infrastructures), it is essential to have sufficient guarantees that the mechanism would not be retracted at an unexpected moment, for instance following a WTO ruling.

There is abundant literature available on the issue of carbon border mechanisms, which seems to indicate that it is perfectly possible to design a WTO-compatible instrument. As explained above, it is however important to keep free allowances during an initial phase, to ensure that the industry is not left unprotected should legal (or political) disputes arise.

In assessing WTO compatibility, specific attention needs to be paid to respecting the non-discrimination rule which is most likely to be respected when a "mirror-image" system to the EU ETS is designed for third country producers. In such case, however, it is important to determine from which source third country importers would buy allowances, i.e. from the EU ETS allowances volume or, as suggested in the discussions with the French Government, from a virtual volume of allowances.



OFICEMEN would also encourage the EU to discuss the design of a mechanism that would encourage third countries to adopt similar carbon reduction measures as to those applied to European producers.

Principle 4: An EU carbon border mechanism must be applicable to all sectors alike

We understand that the cement sector is considered as a potential 'pilot sector' for carbon border mechanisms. We think it is however important that as many sectors as possible are included – the principle should be that the carbon border mechanism will be applicable in the widest sense and should not seek to differentiate between sectors.

If a mechanism is limited to only a few sectors or sub-sectors, it will inevitably create distortions of competition on the EU internal market. These market distortions would have a significant impact on downstream markets such as the construction sector. We therefore believe that a carbon border mechanism should apply to all the sectors covered by the EU ETS.

<u>Principle 5: A carbon border mechanism should provide for an CO₂ charge exemption for EU exporters</u>

Finally, a carbon border mechanism should provide for a CO₂ charge exemption for EU exporters to third countries, if the third country in question is not covered by a carbon pricing mechanism.

As the climate ambition of the EU increases, leading to an overall increase of CO2 costs, European cement plants will face increasing competitive disadvantage in relation to producers in third countries. This will result in lower access to export markets for the European industry, with a negative impact on global CO_2 performance.

The carbon border mechanism should therefore include a CO₂ charge exemption for exports of EU plants. This would act as a further incentive to ensure third countries set up carbon pricing schemes, with an international Monitoring, Reporting and Verification (MRV) in place. Such export rebate can be designed as compatible with WTO rules under the so-called destination principle which requires that operators exporting to a third country should be treated the same way as the domestic operators in that country.

In the long-term, other forms of mechanisms could be envisaged

The above principles focus on the creation of a carbon border adjustment mechanism running in parallel to the EU ETS in the coming years. We believe that such model would be the most practical and realistic, at least until the end of phase IV of the EU ETS in 2030.

However, after this date, different forms of carbon border mechanisms could be envisaged. The mechanism could continue to run in parallel to the EU ETS, as described above. Alternatively, the creation of a CO₂ consumption charge applied indistinctly to EU and non-EU products could also be envisaged. Such form of mechanism would present opportunities, but also has complex ramifications and impacts which should be analysed. OFICEMEN stands ready to support this work in due course.