Cem'In'Eu
Cement Innovation in Europe

Cem'In'Eu comments on the inception impact assessment of a carbon border adjustment mechanism

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Cem'In'Eu supports the long-term objective of climate neutrality in the EU and its Member States by 2050. The EU's 2030 climate target should be in line with the objectives of the Paris agreement. In this perspective, we welcome the development of an **effective carbon border adjustment as a tool for the transition to carbon neutrality**. We appreciate the opportunity to provide comment on the design of a *Carbon Border Adjustment Mechanism* and thus participate in the building of a successful measure to **foster innovation in the cement industry**, as cement is responsible for 5% of global CO^2 emissions.

Executive summary

Cem'In'Eu would be pleased to share its expertise with the European Commission and thrive the positive outcomes that such a mechanism could bring. In our view, the carbon adjustment mechanism should:

- Be designed to be compatible with the EU ETS
- Include provision to secure free allowances to new entrants, even importers, based on the similar benchmark used for the ETS, to support the most modern actors which made investments to reduce their carbon footprint
- Be compliant with WTO rules and thus ensure a level playing field among importers and EU industries
- Be a tool to promote innovative low-carbon investments.

But this mechanism should not be designed as a way to protect European polluting industries which already benefit from the wrongly calculated free allowances linked with the inefficiency of the EU ETS III.

Who we are?

Industrial start-up, Cem'In'Eu developed a new concept for the production and sale of cement in Europe. Our approach to the market is based on the principle of « small is beautiful» with small, compact and standardised production units located as close as possible to regional economic areas. Following the opening of its first milling plant Aliénor Ciments in Tonneins, South West of France in July 2018, Cem'In'Eu foresees the setting-up of 4 new sites in France and 2 in Europe.

Cem'In'Eu built a completely new and fully optimised business model to reduce the environmental impact of each activity along the entire value chain (see the concrete example at the end of the document). Carbone4 (http://www.carbone4.com/) calculated the carbon footprint of our company and of our products. **In one year, we decrease our carbon footprint by 25% thanks to the optimisation of all levers** (Clinker selection, logistics, cement recipes and packaging).

We are convinced that the new carbon border adjustment mechanism would be a powerful tool to thrive for greener products.

Cem'In'Eu's contribution

To contribute to the in-depth analysis Cem'In'Eu presents the following elements for consideration:

1. The EU should continue to work with global partners in applying **ambitious carbon pricing,** that will drive changes. It is thus crucial to ensure that the future mechanism will **comply with World Trade Organisation rules**. This requires a thorough analysis of the legal and practical feasibility of introducing such a mechanism. Importers and European actors must be treated equally in order to avoid any distortion of competition or unfair protection for old and polluting European cement industries.

2. This mechanism is particularly relevant for the construction sector with the renovation wave announced by the Green Deal. Indeed, cement is the essential binder for the manufacture of concrete, which is involved in more than 80% of constructions. All initiatives must be carried out in a comprehensive approach to foster innovation and move from a *status quo* that was misused by cement industries for years. The EU should set the carbon border adjustment mechanism in a way that will **incentivise investments made to innovate for low carbon solutions**. The carbon Border Adjustment mechanism would prevent innovation if it acts like a protective tax.

3. **A new carbon customs duty or tax on imports will not give the right signal** to the industry. This is a matter of efficiency, as such a design will not incentivize old European cement industries to invest in low carbon solutions. Cem'In'Eu fully supports the idea of the **extension of the EU ETS to imports with measures to safeguard the level playing field.** New entrants, even from outside Europe, in the cement industry have the power to foster innovations and transform traditional industries.

4. The carbon border adjustment mechanism should **avoid complexity in design and administration**. It should not be misused **as a protectionist barrier** that will benefit to less innovative or more polluting factories. Cem'In'Eu sees this mechanism as a way to **massively scale up the cement industry's contributions to the carbon neutral transition**, by incentivizing the most efficient ways to lower emissions thanks to:

    a. innovation that improves the energy performance of installations
    b. a complete shake up of the supply chain taking into account the whole industrial process (upstream and downstream)

5. To be efficient and fair, **the tax must apply the same CO2 benchmark per ton of clincker as that in force for ETS 4**. Moreover, **new entrants, even importers should benefit from free ETS quotas based on the benchmark**, for a fair measure. The previous EU ETS system until phase 4, created perverse effects that biased the system. Indeed, it did not generate a dynamic carbon price. In the definition of carbon content of products, the European Commission must integrate the full supply chain, not just the final product.

Cem'In'Eu is convinced that the carbon border adjustment mechanism is the right tool to foster innovation in the cement industry. It could create a momentum for a behavioural change if well coordinated with the EU ETS. The carbon adjustment mechanism, as a structural measure, must be built on the right design to be a cornerstone of the European Green Deal.

What can be done to reduce now CO2 emissions?

Cem'In'Eu developed a new conception of the cement industry to effectively reduce the carbon footprint of the product. We act on different elements to leverage our action:

- **Clinker selection**: Our clinker producer operates with a new plant from 2015 whereas the last kiln built in France for example was in 1978. On average only 51% of the European producer used the most advanced technologies being dry process with preaheater and precalciner (https://gccassociation.org/gnr/). We know that modern plants use up to 40% less fuels than old "wet" process (https://gccassociation.org/gnr/). We also choose our clinker producer for logistics reason. The plant is based on a port, this avoids additional upstream logistics CO^2 emissions.

- **Supply Chain optimisation**: We import our clinker by big vessels from Turkey to the port of Sète. The plant is located on the main Toulouse-Bordeaux railway line with existing branches leading to vacant sidings, one of which is exclusively for use by Aliénor Ciments. Clinker arrives at the site by train from Sète. To support its clinker logistics, Cem'In'Eu built a 60,000t clinker storage yard at the port of Sète, Cem'In'Log, allowing clinker to be transported directly to the plant by rail, the most efficient means of transport in terms of CO^2 per t/km.

  We use a unique process, a bespoke container-based transport system, thus the clinker can be moved without any dust. Upon arrival each container is lifted individually by an automated overhead crane and loaded into the discharging position at an angle over the discharge bin, enabling a full train of 26 cars, loaded with 52 containers of 32 t of clinker each, allowing 1.680 t to be unloaded and reloaded in less than five hours. Every single journey of this train, with almost no CO^2 per t/km, avoids 60 truck on the road and the huge CO^2 emissions linked.

  - ✓ By stopping the use of trucks to transport clinker from the port to plant, we reduced our CO^2 emissions by -10 kg of CO^2/tonne of equivalent cement (calculation based on the Carbone 4 audit method)

  - ✓ Thanks to an optimized supply chain, our upstream logistics emissions are equivalent to our downstream logistics emissions. The vessels emissions between Turkey and Sète and the rail between Sète and Tonneins, produce the same level of emissions (about 28kg of Co^2) as the deliveries by trucks to our customers in our catchment areas of 200kms.

- **Plant optimisation**: Aliénor Ciments is a 0.24Mta cement grinding plant located in Tonneins. Its modular design enables it to be constructed quickly, efficiently and environmentally friendly. The mill uses around 105t of Vega grinding balls to grind the clinker. To reduce the nuisance of the grinding process, the mill building is covered in a special cladding to lower noise pollution by 32dB to 82dB when the mill is in operation. In terms of emissions control, air compressors are used to move material and any dust is contained. The plant is equipped with a Scheuch baghouse with 6.5m-long bags for dust capture. There is also a stack which only emits waste air from the process and dust is kept below 20mg/Nm3.

  - ✓ **The plant** – using Carbone 4 methodology with fixed assets & immobilization, energy consumption, company cars & vehicles, staff travel - **produces only 5kg of CO2/tonne of equivalent cement**

- **Cement recipes:** As a cement producer we can change blends and reduce the proportion of clinker used.

  - ✓ Cem'in'Eu reduces the clinker factor and we reduce by -15kg of CO^2/tonne of equivalent cement

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We are on the EU transparency register under to number: 506912037725-23

Find out more at: www.cemineu.com