outokumpu
high performance stainless steel

Input to Inception Impact Assessment
of Carbon Border Adjustment
Apr. 1st, 2020

EU climate leadership requires strong carbon leakage measures - an effective Carbon Border Adjustment is an essential part of the climate change mitigation

- Carbon Border Adjustment (CBA) would be supplementing the European Climate Policy. It is needed to achieve the long-term ambitions of EU climate policy while avoiding carbon leakage. CBA can also be seen as a temporary tool whereas the long-term target is to have a global price for carbon.
- CBA should be based on the whole carbon footprint which takes into account direct emissions, the emissions from electricity production as well as the emissions from the production of raw-materials. If this is not possible in the scoping of CBA, then EU should immediately start preparing standards to set limits for carbon footprint. The timing and products should be the same as for CBA.
- In the transition towards global climate neutrality, CBA needs to complement the current for carbon leakage preventing measures in the Emission Trading System, i.e. free allocation and compensation for indirect costs.

Carbon emissions need to be reduced globally

With the European Green Deal, the EU aims to be a global leader for the EU leadership in the global climate change mitigation. The target of the Green Deal is to be the first carbon neutral continent by 2050 and to increase the ambition of CO2 reduction to 50…55% by 2030. The ambition level of other countries can be assessed after 2020, when signatories of the Paris Agreement have submitted their final Nationally Determined Contributions.

Global CO2 emissions continue to grow. In addition to economic growth in emerging markets, this growth is driven by carbon leakage as it is more cost efficient to produce goods in emerging markets with lower environmental costs compared to production in EU. This is evident in the steel market where imports of stainless steel now account for more than 30% of the European steel consumption. At the same time, the steel produced in Asia creates up-to 5 times higher CO2 emissions compared to European producers' emissions. Avoiding the risk of carbon leakage is a pre-condition for preserving the environmental integrity of EU climate policy and industrial competitiveness, since it contributes to reduce emissions at global level while maintaining jobs and investments in Europe.

Carbon Border Adjustment is essential for the European carbon-neutrality

Tackling successfully the risk of carbon leakage in the steel industry is particularly relevant due to the market characteristics of the sector. The 2018 Commission Communication "A clean Planet for All" and the 2015 Impact Assessment accompanying the Commission proposal on the post 2020 EU ETS Directive recognize the steel sector as the most exposed sector, both in terms of possible impact on output and on investment. Also, the European Green Deal underlines that the risk of carbon leakage can materialize in different forms, *"either because production is transferred from the EU to other countries with lower ambition for emission reduction, or because EU products are replaced by more carbon-intensive imports".*

As long as there is no international binding agreement with a global carbon price and equivalent efforts and the level of ambition between the EU and other countries differs, there is a need to reduce the risk for carbon leakage with effective measures in the short and medium term. This risk has been addressed by granting free allocation and indirect compensation in the EU ETS.

EU ETS free allocation and indirect compensation are designed mainly to address the risk of production relocation, thus tackling the carbon leakage only partly. Carbon border measure can be an effective instrument to address structurally the emissions embedded in the imported products if it takes into account the total carbon footprint. This would incentivize all companies globally to reduce their carbon footprint to remain competitive. CBA could also be an effective tool of political diplomacy to foster climate ambition in the third countries exporting to the EU so that higher emission reductions are delivered globally. The preparation of

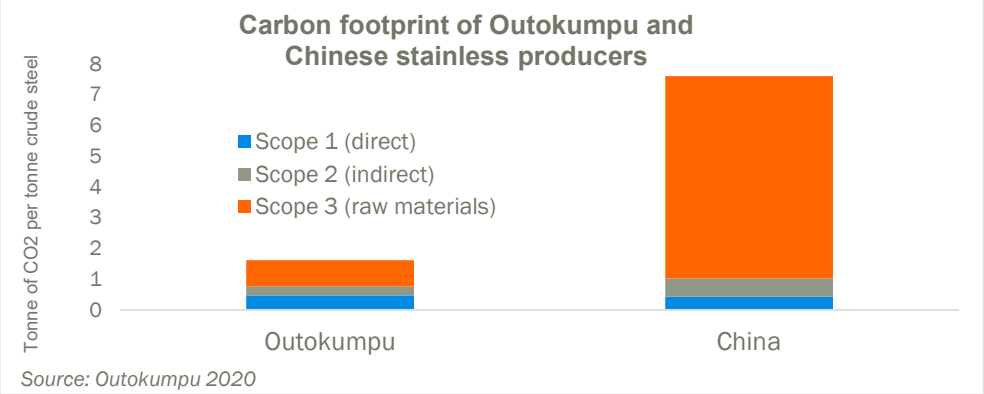
carbon border adjustment should start with the most vulnerable sectors, such as steel. Especially for stainless steel, it is crucial that Carbon Border Adjustment will take into account the whole carbon footprint.

Carbon Border Adjustment must include the whole carbon footprint to be effective

The effectiveness of the border measure will depend on the details of its design. As long as imports into EU are setting the steel price at lower value and with a bigger carbon footprint, the situation is causing a concrete risk of leaking emissions, jobs and investments to third countries. At the same time, the situation is counterproductive for the successful implementation of the European Green Deal.

Two examples on how the level of CBA should be defined:

1. Taking into account the comprehensive product footprint including direct emissions, indirect emissions and the production of raw material (scopes 1, 2 and 3). Considering the entire footprint is needed to create the optimal incentive to improve the carbon footprint of the entire supply chain.
2. Setting the level of CBA based on the available data of worst available technology by country. To an importing producer to gain a lower CBA, they would need to provide evidence that they have a smaller carbon footprint than the worst available technology in their home market.



Source: Outokumpu 2020

The chart above illustrates the need to include scope 3 into carbon footprint calculation of stainless steel products as a significant part of the product CO2 footprint is typically attributed to scope 3. Including scope 3 could also tackle the risk of source shifting. If it is not possible to take the whole carbon footprint into account, the EU needs to set limit values for product carbon footprint. The time-schedule and scoping should be the same as for carbon border adjustment.

Reporting and measurement of carbon emissions as part of CBA

The reliability of the carbon emission data will be the biggest challenge for CBA. The data submitted by producers should be measured and reported according to a specified protocol and there should be a verification by a third party. The EU should define a standard for the calculation of the total carbon footprint. It would also be possible to use international standards, for example for life cycle assessment and protocols, in the submission of data and in setting limit values.

In case the provided data would not be enough, there is scientific literature available that the EU could use. There are also initiatives done by the EU Commission to study and pilot footprints. For example, the EU has piloted Product Environmental Footprints (PEF) and Organization Environmental Footprints (OEF). A PEF study measures all quantifiable environmental impacts over the life cycle of your product, including emissions to water, air and soil, resource use and depletion, and impacts from land and water use. For the purpose of CBA, only CO2 related data would be used.

The current carbon leakage measures are still needed

Until the EU has a comprehensive CBA mechanism and enough experience of its functionality, the current tools to reduce the risk for carbon leakage, i.e. free allocation, and indirect compensation, are essential. Even if it is important to develop a border adjustment as soon as possible, its implementation should not lead to abrupt modifications of existing provisions in order to secure legal certainty for long term investment decisions. In particular, rules on carbon leakage measures for the period until 2030 have been adopted very recently and should not be modified. Even with free allocation and compensation, EU producers bear carbon costs that are not applied to extra EU competitors. This divergence will further increase in the future.

A carbon border measure implemented as a complementary instrument would also reduce the direct impact on trade flows and would mitigate trade tensions as it would provide a longer transition for negotiations with international partners to align climate ambition. A border measure complementary to free allocation and indirect costs compensation would also decrease the product price impact on downstream sectors within the EU, hence better preserving the entire value chain.

A carbon border measure should be applied for a transition period, until breakthrough technologies reach sufficient market penetration and products with low carbon footprint reach a critical mass in the market. At the same time, it is an effective tool of political diplomacy to foster climate ambition in third countries so that more ambitious reductions are delivered globally. Furthermore, it would provide additional revenues to the EU that should be fully used for climate measures, in particular for the development and upscaling of industrial breakthrough technologies.

EU producers are subject not only to compliance costs for the difference between their emissions and free allocation and between indirect costs and compensation (i.e. the “trade” element of the EU ETS), but also to the full abatement costs that are necessary to develop the breakthrough technologies required to fulfil the emission reduction targets (i.e. the “cap” element of the EU ETS). A border adjustment replacing the existing carbon leakage measures would undermine their financial ability to invest in those technologies.

There is also a need for a long-term regulatory framework for the advanced transition phase and the post-transition, i.e. when the breakthrough technologies reach sufficient market penetration and CO2-lean steel represents a critical mass of the market, but operation costs are still significantly higher than for competitors with CO2-intensive production. Such framework should be based on the actual CO2 footprint of the product over the entire lifecycle, requiring the development of a proper accounting system, both at the EU level and at the border.

Outokumpu Oyj, EU Transparency Register ID: 085686030231-69
Salmisaarenranta 11, 00180, Helsinki, Finland

More information: Mia Nores, Head of Low Carbon and Energy Efficiency
mia.nores@outokumpu.com, +358 44 330 0928