

STEAG's Position to a legislative Proposal for a Carbon Border Adjustment Mechanism

"Europe should be developed to an economic role model and less to a low growth pioneer in isolation. The Paris Agreement leads the way to a common solution by markets not to a new kind of self-elected climate quarantine."

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Summary

Europe is not an island of climate policy, but one of the largest and most integrated markets in the world. As an export-oriented union, Europe is involved in both international trade agreements and the Paris Agreement. Moreover, it is not a question of cementing existing technologies, but of developing new ones. We want Europe to stay an attractive location for investments and as a basis for our wide range of businesses and growth prospects.

If CO₂ Border Adjustment is to set the right signals, there are five criteria for the establishment of systems, of which all must be met. Only criterion 2, the cooperation under the Paris Agreement can be implemented independently of the other four criteria. But unfortunately exactly this Paris oriented criterion does not play any role in the current debate.

Europe should be careful with the precious Paris Agreement to find an appropriate solution. A one-side establishing of a CO₂ Border Adjustment without a common accepted calculation basis (Art. 6) could act like an implicite one-side denunciation of the essential Art 6 of the Paris Agreement by the EU, leading in a climate policy isolation and leaving the common mitigation path way.

- Criterion 1: Simple recording and evaluation, no disturbance of trading or debit of already existing certificates by the recording.
- Criterion 2: Support of international cooperation in climate policy on the basis of the Paris Agreement (nomenclature and Article 6 [Cooperation]).
- Criterion 3: WTO conformity for the two-way sluice system. In other words, the WTO would become an enabler of climate policy. Accordingly, the WTO should not be overburdened.
- Criterion 4: Product-oriented border adjustment will only be introduced if it can lead to a complete discharge of the CO₂ load.
- Criterion 5: Product-oriented border equalization must promote innovations that are focused on international competitiveness.

Nevertheless, for an efficient mitigation of greenhouse gases it is recommendable to follow an international pathway, not treating Europe like an island.

In its core, it is about shaping growth and enabling investment in low-carbon or CO₂ neutral technologies, not about organizing social renunciation. Markets that send investment signals and stimulate innovation are therefore needed, not state-arranged scarcity.

1. In general

Why do we care? We are worried about the possible implementation of a CO₂ border adjustment mechanism in our home market and for our international business. We plan, develop, construct, operate and market high-efficiency power plants and their by-products. Besides custom power and heat generation solutions, we offer a wide range of energy services. We are afraid that the European location is rendered less advantageous for new industrial installations due to uncertainty about state interventions and price reasons. The prices not only for imported components will increase. Investment signals and capital could just move to other regions. But by violating the world wide approach of the Paris Agreement we fear the reduced chances to use our knowledge abroad and especially in developing countries. So such a scheme has to work at once and internationally harmonized.

It is a concretely unknown theoretical approach. It is either a matter of isolating the European market on climate policy grounds or of fiction that border adjustment is an option to protect the European market from all additional burdens from climate policy. The additional fiction may be that these burdens could effectively be cut or disburdened accordingly. With the simultaneous removal of the existing mechanisms that serve to relieve the burden (industrial exceptions etc.). And this will also further disrupt the energy system.

Theoretically, with a view to a well paved and sealed CO₂ island, it is possible to achieve price compensation in two directions, like in a sluice. However, the prerequisite in European reality is that all borders must be tightly and controlled uniformly.

This requires consistent measurement and evaluation, especially internationally. The past (partial misuse of CDM and JI instruments) shows that this leads to complex challenges in the global reality.

In any case, a question mark must be placed behind the reliability of statistical data in many countries. Even if CO₂ pricing systems also exist there, taxing on fossil production processes is by no means self-evident. In addition, there are also very different production conditions and balance-sheet optimization possibilities within countries, as it is also practiced in European industry within complex regulatory frameworks.

There should be taken a closer look on these aspects:

- a. The calculation base can be different it-self: there are emission trading schemes with floating prices as well as tax schemes with fixed prices.
- b. It is tricky if a Carbon border adjustment scheme is to be carried out on the basis of the cost of alternative, low-carbon technologies which, however, determine higher production costs.
- c. Even with a Carbon border adjustment scheme, incentives for the worldwide efficient division of labor should remain set. Plants should be operated where they can deliver the highest added value. (This should be a chance also for European companies.)

2. Record, measure, evaluate

Such a scheme has to be clear, evaluable and predictable. But, the evaluation of CO_2 quantities is challenging as products and primary products may have crossed borders several times and the CO_2 footprint can hardly be determined. Product and regionally oriented lump sums are also problematic. ¹ There should be taken a closer look on these four aspects, too:

- a. Usually only CO₂ is priced, but not greenhouse gas emissions.
- b. In addition, a value must be calculated which may also have to take into account the electricity mix, subsidies for fossil fuels, etc.
- c. Complex certifications of carbon footprints are also conceivable. However, there are already numerous certificates, including cross-border certificates, which would have to be taken into account (e.g. certificates of origin for Norwegian hydropower).
- d. Emissions trading means fluctuating prices, and it is also based on emissions, whereas the national system is upstream oriented, i.e. based on theoretical emissions; the financial taxonomy is based only on assumptions.
- e. Simplifying the Carbon Border Scheme to a single or two product scheme (steel, cement) will have an effect on the import of finished goods instead of production of primary products in Europe.

Derived there is criterion 1 which has to be fulfilled: A functioning Carbon Border Adjustment scheme needs a simple recording and evaluation or measuring. The aim should be no disturbance of trading or burden of already existing certificates by the recording.

¹ The German Council of Economic Experts (Sachverständigenrat zur Begutachtung der gesamtwirtschaftlichen Entwicklung) evaluates the approaches of a CO₂-based border adjustment as theoretically attractive, but: "Schwierigkeiten bei der praktischen Umsetzung (Tamiotti et al., 2009). Hierzu zählt insbesondere die eindeutige Bestimmung der produkt- und länderspezifischen CO2-Emissionen. So sind in den allermeisten Fällen die bei der Produktion anfallenden Emissionen nicht anhand des Endprodukt feststellbar und müssen abgeschätzt werden." "Bei einem Emissionshandel kommt erschwerend der Umgang mit den CO₂-Preisschwankungen über die Zeit hinzu. Eine weitere Schwierigkeit beim Grenzausgleich bestünde darin, nichtpreisbasierte Reduktionsmaßnahmen in den Herkunftsländern zu bewerten und angemessen zu berücksichtigen." Annex I of "Jahresbericht – Sondergutachten 2019"

3. WTO and commercial contracts

There are two relevant international schemes which have to be taken into account: The international trade, under the rules of the World Trade Organization (WTO) and the Paris Agreement about international measures for climate protection.



The idea of a Carbon Border adjustment scheme looks into two directions, like a system of a ship lock. So, it is decisive to solve the following issues:

- a. A crucial problem remains the continuous subsidization of exports by the carbon border adjustments, in the sense of cost relief; it is easier to imagine a burden on the CO₂-footprint of imports.
- b. This means that imports may be made more expensive in order to protect national / European production from a kind of felt dumping regarding Greenhouse Gases, but the export of particularly affected products would no longer be competitive.
- c. This results in intensive negotiations in commercial contracts with an open outcome.
- d. It is likely that the price of intra-European production and European sales will increase.
- e. The DIW (German Institute of Economic Science, Berlin) prefers the other way around and orientates its consumption load towards CO₂-intensive products within Europe. This means a selective burden on products without carbon border adjustment.²
- f. Problematic is the non-fact-based misjudgement that the European Economic Area will become more attractive by increasing its price. It is more likely that international markets, possibly only certain products, will avoid Europe.

The German "Sachverständigenrat" (Council of Economic Experts) was also concerned about international frictions, even if the WTO's questions could be solved.³

Derived criterion 3: WTO conformity for the two-way sluice system. In other words, the WTO would become an enabler of climate policy. Accordingly, the WTO should not be overburdened. (This would be easier if it was based on the Paris Agreement.)

³ This is the assumption of this article from the US perspective from the year 2013, for example: https://www.climateadvisers.com/wp-content/uploads/2017/07/2013-07-Changing-Climate-for-Carbon-Taxes.pdf

² The Impact of Implementing a Consumption Charge on Carbon-Intensive Materials in Europe https://www.diw.de/de/diw_01.c.635169.de/publikationen/externe_referierte_aufsaetze/2019_0000/the _impact_of_implementing_a_consumption_charge_on_carbon_intensive_materials_in_europe.html Inclusion of Consumption in Emission Trading

4. Orientation towards an international Climate Policy

As a matter of fact, the WTO is not the biggest challenge because in the WTO dimension a Carbon Border Adjustment will be valued either under the regulation of customs or like a normal trade barrier. There are processes implemented for this, already. And hopefully the WTO is strong enough to handle it.

Much more difficult it is to keep up with the still developing Paris Agreement following COP21. Because a carbon border adjustment scheme has in principle to

- a. be based on the still incomplete nomenclature of the COP21 treaties, and
- b. refer to Article 6 of the Paris Agreement, which allows parties to cooperate in the implementation of their national contributions (e.g. linking national or regional instruments such as the European Emissions Trading Scheme with comparable schemes to create a common cross-border carbon market).
- c. focus on international measures for CO₂ reduction on the basis of Art. 6 and also integrating them mathematically into its own climate protection goals, including financial forms.
- d. Understanding how to deal with the different perspectives: The Paris Agreement was based on the regional source principle, but a Carbon Border Adjustment is based on a product backpack.

Article 6 is particularly interesting in detail: **Article 6 of the Paris Agreement** mentions voluntary cooperation and market mechanisms to achieve a reduction. Cooperation is based on joint mitigation/a joint assessment in order to act across borders. At the Madrid climate conference, no agreement was reached on this assessment.

In three steps it is to be examined under which conditions border adjustment can be in conformity with the Paris Agreement, or can be neutral to the Agreement or contradict the Paris Agreement.

(1) Under what conditions can the border adjustment be in conformity with the Paris Agreement?

Positive assessment: In order to fit in with Art. 6, carbon border adjustment must be either a concrete intergovernmental cooperation, a common sustainability mechanism or a non-market-based approach yet to be defined. A conceivable solution under 6.2. would therefore be a voluntary intergovernmental agreement by the European Union, e.g. with China, India and Australia, on the basis of which the differences in CO₂ pricing systems would be offset-with agreement on measurement and evaluation. Discussions on this are not public known. Moreover, partial agreements would not provide comprehensive protection for the European steel industry or similar.

In order for a Carbon Border Adjustment to be based on emissions trading systems with individual states, further agreements would be necessary in addition to controls. For a comprehensive border adjustment on this basis to be in conformity with Paris, however, an agreement would first have to be concluded with all Paris states. And additionally, with the USA.

Carbon Border Adjustment is not a common sustainability mechanism according to 6.4. After all, there is nothing commonly done for reduction - except perhaps if the revenues from the border adjustment were used for international measures. It could be argued, if necessary, with reference to 6.4. (a) that the Carbon Border Adjustment promotes sustainable development in the EU and is therefore a mechanism, but this sounds far-fetched.

It would be a common market mechanism if other states were to integrate themselves - factually/calculatively - into emissions trading. In that case, however, the border adjustment is not needed for these states, but for those that are <u>not</u> participating.

As border adjustment tends not to be a market mechanism when relative prices are set politically, a "common mechanism" is not simply the result. Since CO₂ in the non-ETS area is recorded and priced very differently in the EU, political pricing is unavoidable.

Thus, conformity to the Paris Agreement needs to value a Carbon Border Adjustment Scheme as an accepted "non-market mechanism". But this is not feasible, because the needed rules do not yet exist.

(2) Examine whether it is simply Paris-neutral if the EU introduces border adjustment

Border adjustment must be based on a common assessment methodology. This always requires a minimum level of cooperation. And the assessment of emissions is complex. A - financially effective - $"CO_2"$ customs system" intervenes in all forms of intergovernmental cooperation in $CO_2"$ reduction and evaluation.

It therefore can only be halfway neutral if the price effect is not large. Thus, a mini-borderadjustment (in terms of volume and price difference) could be neutral, but it could also not have any effect.

If the EU unilaterally sets relative prices for imports (or even exports) of CO₂, this is not (any longer) related to a joint reduction, but rather to securing an isolated reduction. And it can also be a relocation of emissions if products that were previously produced in Dublin for Morocco are, after the introduction of border adjustment, manufactured directly outside Europe for the world market.

(3) Negative consideration whether it contradicts Paris when the EU introduces border adjustment, even if it cannot be neutral

Border adjustment may even be the opposite of the Paris Agreement, not only because of the spirit or the regional perspective on emissions, but because it contradicts the goal of transnational cooperation.

However, border adjustments are not explicitly prohibited in the Paris Agreement. However, that does not go far enough, because it is about the underlying measures, which are not being internationally coordinated at the moment or even amount to a joint reduction. Border adjustment attempts to protect unilateral EU measures, not to achieve a joint reduction.

Therefore, the problem is that a border adjustment system only makes sense - if at all - if no chance for global mitigation, cross-border ETS etc. is seen. This means that an introduction that does not fit in positively with Paris must be an implicit denunciation of Art 6.

Conclusion:

If the EU sees itself as a pioneer and role model in climate protection, then it should be ensured that border adjustments actively match the joint global greenhouse gas reduction. Otherwise it would rightly be understood as a climate policy isolation.

The unilateral introduction of a border adjustment system, equals to a high probability of a de facto termination of Art.6 (also because of the questions of assessment, measurement etc.).

A comprehensive Carbon Border Adjustment scheme can only have a reasonably neutral effect with regard to Article 6 if it does not lead to major price changes.

A comprehensive Carbon Border Adjustment will only probably fit in with Art. 6 if a new accepted "non-market mechanism" is found that improves coordination in climate protection. This may include individual products or similar. But the mechanism does not yet exist.

Derived criterion 2 which would have to address these concerns internationally: Support of international cooperation in climate policy on the basis of the Paris Agreement seems to be very decisive.

5. Specific problem of goods with high CO₂ content at high prices

For products containing only small amounts of metal, plastic, etc., the CO₂ price is not the relevant parameter.

On the other hand, the CO₂ content of basic materials such as steel is very high. Under a Carbon border adjustment scheme this would lead to a significant change in prices in the event of high CO₂ prices. In other words, the more important a carbon Border Adjustment is for the protection of products, the more difficult it will be to implement it on the WTO side or without international trade conflicts.

This is further complicated by the fact that these products are particularly dependent on CO₂ compensation, including the existing exemptions and fundings, such as the funds from the ETS. This risks that only a proportionate carbon Border Cdjustment will be introduced for certain products. As a matter of fact, this will be outside the system, disrupt markets, affect emissions trading and not even help the industry concerned.

Derived criterion 4: Product-oriented border compensation should only be introduced if it can lead to a complete compensation of the CO₂ load.

6. New Technologies

The statement that a border adjustment can take CO₂ costs fully into account is based on the assumption that comparable technologies are used at both national and international level.

If steel would be produced in electric steel furnaces in France, in blast furnaces in Italy and on the basis of hydrogen in Germany, this would not be comparable within Europe. However, the possibly more expensive production based on hydrogen and the electric steel furnace would not be CO_2 intensive anymore. A Carbon border adjustment can possibly no longer be carried out. The steel would then simply remain more expensive. The same must apply for the cement industry.

Thesis: A carbon Border Adjustment initially prevents innovations because it acts like a protective tax here. But this protective fence is suddenly teared down if new technologies are utilized.

Derived criterion 5: Product-oriented border equalization must promote innovations that are focused on international competitiveness.

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