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EU Emissions Trading System without competitive disadvantages

Policy recommendations:

- The Emissions Trading System (ETS) will be fully effective if its discretionary exemptions are omitted. The carbon-leakage list in particular should be replaced with a full border adjustment (BA).
- The BA helps to prevent carbon leakage and restores competitive neutrality to EU enterprises.
- The burden of the BA must be closely linked to the actual burden of the ETS.
- A product- or sector-based BA is likely to be compatible with WTO rules, correspond to the principle of competitive neutrality, have a positive effect on climate protection, and be less bureaucratic than other forms of BA.
- The new export rebates must be limited to products that are actually exported. Export rebates do not limit the effectiveness of the ETS if they are accounted for when fixing the cap.
- Foreign countries should have the choice between two options: the BA and integration into the ETS.
- If the revenue of the import BA respective of the integrated ETS is used for climate funding, a double dividend for climate protection can be facilitated.

The EU Emissions Trading System in the context of stagnating climate negotiations

International climate negotiations have not led to significant progress with regard to the reduction of greenhouse gas emissions. There must either be a new impetus for these negotiations or climate protection must improve without a multilateral agreement. Countries can become first movers either unilaterally or within a coalition of the willing. Such strategies can offer incentives, independent of past multilateral commitments for climate protection. If climate protection on a small scale succeeds, this can serve as a starting point for ambitious measures in the global context as well.

The European Union (EU) is one such first mover in climate protection. It plans to reduce greenhouse gas emissions by 40 per cent by 2030.¹ To fulfill the commitments of the Kyoto Protocol and also independently of this agreement, it has established its own emissions trading system (ETS) which is already in its third phase (2013-2020). The EU's ETS is in principle a suitable instrument for ambitious climate protection. Emission allowances are allocated according to the European reduction target. The free allocation of emission certificates is soon to be replaced by auctioning (2027). Due to the limited number of allowances (cap) the market mechanism generates a price for emissions which creates strong incentives to reduce CO₂ emissions. The overall burden is distributed cost-efficiently among the Member States and between their enterprises. These incentives foster investments in both low-carbon technologies as well as in higher energy efficiency for consumption goods.

Irrespective of the critique that the reduction target might be too low, there is another reason why the effectiveness of the ETS is limited. Unilateral climate protection involves the danger of competitive disadvantages. These disadvantages would potentially increase if the reduction target became stricter. In this way, if only the EU reduces CO₂ emissions, European producers will suffer from a competitive disadvantage, especially in CO₂-intensive sectors. Hence, the production and the respective CO₂ emissions might relocate to foreign countries (carbon leakage).

The existing method of dealing with this problem is an exemption for those sectors threatened by carbon leakage by allocating emission allowances for free (grandfathering). The foundation of this procedure is a carbon leakage list.² However, discretionary measures for compensating the competitive disadvantage reduce the effectiveness of the ETS.

With this in mind the following questions have to be answered:

- How can the EU ETS become a powerful instrument for a cost-efficient climate policy?

- How should the instruments for the prevention of carbon leakage and competitive disadvantages be designed?
- Which amendments for the existing ETS result from this?

Border adjustments aimed at improving the EU Emissions Trading System

As long as the EU ETS creates a competitive disadvantage for European industry, exemptions will be pursued by those affected. These exemptions, however, undermine the effectiveness of the ETS. To avoid this, border adjustments (BA) should be implemented that compensate for the higher costs posed to European producers. In this way the EU ETS is able to prevent a competitive disadvantage for European producers compared to their (non-European) competitors. The adjustment eliminates carbon leakage such that European enterprises lose the incentive to outsource their production to foreign countries with less stringent climate regulation. Furthermore, foreign countries cannot entirely benefit from specializing in CO₂-intensive goods. Properly applied BA promote global climate protection. If a country wants to trade with the EU, the BA incorporates it indirectly into its own climate protection efforts. Accordingly, these countries avoid the BA by setting their own climate policies. Consequently, the BA lowers the opportunity cost incurred by their own climate protection measures.

Design of an effective border adjustment for imports and exports

A full BA is based on the destination principle, i.e. it is consumption-based rather than production-based.³ The adjustment might refer to both imports and exports. In the case of import adjustment, imported goods are subject to European climate regulation. The export adjustment exempts the exports of European enterprises from the burden stemming from the ETS. When combined, both measures neutralize the competitive disadvantage. However, both administrative costs and the compatibility with WTO rules should be taken into consideration when implementing BA.

The import adjustment prevents European industry from suffering competitive disadvantages in the domestic market and reduces carbon leakage. To afford both competitive neutrality as well as compatibility with WTO rules, the BA may not be set higher than the domestic burden. Thus, the design of the import adjustment must also orientate itself to the domestic measure. Imported goods can either be directly integrated into the EU ETS⁴ or a tax corresponding to the burden on the respective domestic product may be levied at the border. If foreign countries have the option to choose between these two alternatives, their regulatory autonomy to define climate policy goals and choose the respective instrument at their own discretion continues to be respected. In the case of the tax at the border, the EU ETS remains unchanged but serves as the framework for calculating the adjustment. The tax

would lead to lower administration costs compared to the effective inclusion into the ETS.

To avoid too high a burden on foreign countries, the calculation base for an import adjustment should be as exact as possible. In this regard, the carbon footprint (effective CO₂ emissions per product) would be counted as an exact method. However, the integral coverage and transformation of CO₂ emissions on every single product would imply huge administrative costs. Moreover, it would become necessary to decide whether indirect emissions should be included or not.⁵ Finally, production-based BA are a controversial issue within WTO law. Therefore, the carbon footprint does not prove to be appropriate.

To construct the BA in both a cost-efficient and legal way, product-related criteria might be a recommendable basis, i.e. products may only be treated differently in cases where this can be based on measurable differences between the final products. One option would be to fix the BA according to sectors. These sectors might have a climate reference even if the exact emissions are uncertain. Products with comparable CO₂ emissions might belong to the same sector even if they differ in some product-related characteristics. The benchmark for the BA is always the equivalent domestic product or sector with the same characteristics. Thus, it is not necessary to measure the actual emissions. This approach is not exact but it does not discriminate against foreign products. If the measure is orientated at product-related criteria or sectors, the administrative costs are lower than in the case of calculating the CO₂ emissions per product. Such an adjustment is better than the existing system without import adjustment. Finally, the positive effect on climate protection could even be strengthened by using the generated revenue (respectively the receipts in case of an auction) for investments in climate policies, e.g. in climate funding.

Analogous to imports, export adjustments prevent competitive disadvantages faced by European industry on the world market. An export adjustment would replace the existing exceptions of the carbon leakage list. Despite exporters also being exempted from the obligation to buy emission allowances, the export rebates suggested here must be strictly limited to the goods that are effectively traded. While the competitive disadvantage is properly addressed by the export adjustment export rebates might weaken the incentive to reduce CO₂. In order to counteract this problem, the cap should be reduced accordingly. BA can, therefore, tackle both competitive disadvantages and carbon leakage.

¹ Cf. European Commission, 2030 framework for climate and energy policies, 24/10/2014, http://ec.europa.eu/clima/policies/2030/index_en.htm (27/10/2014).

² Commission decision 2014/746/EU of 27/10/2014 determining, pursuant to Directive 2003/87/EC of the European Parliament and of the Council, a list of sectors and subsectors which are deemed to be exposed to a significant risk of carbon leakage, for the period 2015 to 2019, OJEC. L 308/114 of 29/10/2014.

³ Cf. Report of the Working Party on Border Tax Adjustments, L/3464, 20. November 1970, para. 4.

⁴ Article 10b para. 1 lit. b of the directive 2009/29/EC of the European Parliament and of the Council of 23/04/2009 amending Directive 2003/87/EC so as to improve and extend the greenhouse gas emission allowance trading scheme of the Community, OJEC. L 140/63 of 5/6/2009; Directive 2003/87/EC of the European Parliament and of

the Council of 13/10/2003, establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC of the Council, OJEC. L 275 of 25/10/2003.

⁵ Different approaches to measure the carbon footprint are discussed by Micallef-Borg, C. (2010), "Product Carbon Footprinting: Calculation and Communication Standards in the Making", *Carbon & Climate Law Review*, pp. 178-189.