



Attn Mr Vicente Hurtado Roa
DG TAXUD
European Commission
1049 Bruxelles
Belgium

Dear Mr Hurtado Roa

PricewaterhouseCoopers International Limited, on behalf of the Network Member Firms of PwC (PwC), welcomes the opportunity to respond to the consultation on the revision of the carbon border adjustment mechanism (CBAM). PwC has recently committed to reaching net zero emissions by 2030, to integrating “net zero” in our work with clients, and to helping shape and accelerate the climate and policy agenda.¹

Diverging international ambitions to reduce CO₂ emissions pose a risk of carbon leakage and thus a risk to the competitiveness of the European economy. We commend the European Commission initiative to reduce carbon leakage and to initiate a global process to engage with trade partners towards meeting climate targets. A CBAM could ensure compensation for competitive disadvantages while at the same time discourage companies from relocating carbon intensive activities. It also might encourage non-EU countries to enact policies in line with the Paris Agreement. Constructive engagement with trade partners will be key in order to find a balance between safeguarding EU producers during their transition to low-carbon and avoiding retaliations, which would damage EU exporting industries and possibly undermine citizens’ commitment to the Green Deal.

We would also like to highlight the importance of consistency and alignment with the revised Energy Tax Directive eg with regard to imported energy products, and in particular that the overall framework ensures “one carbon price” for the Single Market.²

1. Type of Policy Instrument

The Commission is considering three alternative policy instruments for implementing the CBAM: (1) an import tax; (2) a tariff; and (3) a requirement that importers purchase emissions trading system (ETS) allowances.

If equalization of the carbon price between imports and domestic production is the goal, it would be difficult to achieve with a conventional tax or tariff instrument given the volatility of the ETS allowance

¹ See <https://www.pwc.com/gx/en/about/net-zero.html>

² For more details see our response to the consultation on the [revision of the Energy Tax Directive](#)

price. A tax or tariff rate that is less than the prevailing ETS allowance price would fail to eliminate carbon leakage, while a tax or tariff rate above the prevailing ETS allowance price possibly violates the EU's commitment to national treatment of imports under World Trade Organization (WTO) rules. Consequently, a requirement that importers purchase ETS allowances at the prevailing price would appear to be the policy instrument that is most effective in achieving the objectives of the CBAM. To the extent that a portion of ETS allowances are provided free of charge to EU manufacturers, equal treatment would require the same proportion be provided free to importers.

If importers were required to purchase ETS allowances, the price of allowances would rise in response to the increased demand. This would increase ETS allowance auction revenues, raise the price and decrease the consumption of energy-intensive products, and encourage manufacturers to modify production processes to reduce greenhouse gas (GHG) emissions.

2. Determination of GHG Emissions Associated with Imports

Under the current ETS, covered facilities surrender allowances for the amount of GHGs emitted. For CO₂ emissions, this typically is determined based on the carbon content of fossil fuels burned. For example, an iron manufacturer in the EU that burns fossil fuels to smelt iron ore is required to surrender allowances based on the carbon content of the fuel burned in the production process. These allowances are directly related to the production of iron. Emissions allowances surrendered to make electricity used in the production of iron in the EU are indirectly related to the production of iron, but nevertheless are attributable to the production of iron. Consequently, even with basic materials, such as iron, there may be emissions allowances that are surrendered upstream in the supply chain, i.e., "upstream emissions." For consumer products, such as an automobile, emissions allowances will have been surrendered through the supply chains for all the materials – iron, steel, glass, rubber, plastic, aluminum, etc.

Assuming the CBAM requires importers to purchase ETS allowances equivalent to those that would be required to be surrendered if production occurred in the EU, it would be necessary to determine the relevant carbon content. The importer typically would not have any information on upstream emissions, even from first-tier suppliers, let alone suppliers further up the chain. Moreover, for products like an automobile, there may be hundreds or thousands of first-tier suppliers.

Indirect emissions thus pose an enormous challenge to the design of a CBAM that seeks to require surrender of the same number of ETS allowances on imports as would have been required if production occurred within the EU.

One approach would be to limit the CBAM to direct emissions by GHG-intensive basic industrial products like iron, steel, aluminum, cement, glass, paper, etc. As GHG emissions may vary depending on the production process, one approach would be to determine GHG emissions based on the predominant method of production in the EU, which could be determined based on GHG reporting that currently is required for covered facilities within the EU. The EU could publish a list of covered imports and the associated GHG emissions per unit (e.g., ton, litre, etc.) based on direct emissions data currently reported by covered facilities that manufacture similar products in the EU. The "predominant method of

production” approach has several advantages: (1) for the most part, it would impose the same ETS emission allowance requirements on similar products, whether imported or domestic, (2) it is based on information available to EU administrators, and (3) it is relatively simple to administer.

The predominant method of production approach, however, has several drawbacks: (1) carbon leakage would continue to the extent that imports are made using more GHG-intensive technologies than EU competitors; and (2) there would be no incentive to purchase imports made using less GHG-intensive production methods. The latter issue could be addressed, at the expense of increased administrative burden, by allowing importers to purchase allowances based on actual emissions if they can demonstrate use of a cleaner production technology than predominates in the EU.

If the CBAM would be limited to basic industrial products, there would be an incentive to import semi-finished products outside of the CBAM. For example, import of plastic rather than basic chemicals or import of aluminum-based engine blocks rather than aluminum ingot. To address this concern, the CBAM could be extended to certain semi-finished products. However, the longer and more complex the supply chain for a product, the more variability in direct energy utilization by the ultimate manufacturer due to differences in the extent of vertical integration. Consequently, if it is desired that the CBAM applies beyond basic industrial products, comparability across producers with different levels of vertical integration will require that indirect emissions be taken into account. Estimates of indirect emissions through the supply chain could be made based on economic modeling and the use of input-output tables (that tabulate average purchases from other industries to produce one Euro of output of any given industry). Such a system would be more burdensome to administer both because of the larger number of imports subject to tax and the modeling required to estimate indirect emissions.

3. Scope of CBAM

In view of the challenges of administering a CBAM, it could be desirable to limit the scope to imports that are most likely to contribute to carbon leakage. This suggests that two filters could be used to limit the CBAM to imports that: (1) have high GHG emissions per Euro of value (i.e., GHG-intensive products), and (2) are large relative to domestic production (i.e., trade-exposed sectors).

The first filter (GHG intensity) would be expected to select products produced by the same energy-intensive facilities currently subject to the ETS such as: oil refineries, steel works and production of metals, cement, glass, paper, and bulk chemicals. For administrative reasons, the CBAM could be limited to the most GHG-intensive of these products.

The second filter (trade-exposed sectors), applied sequentially, would select imports that represent a large share of the domestic market. These are the products where imports cause the largest carbon leakage and represent the most significant competitive challenge to domestic producers.

If the CBAM would be limited to the most GHG-intensive products, companies would have an incentive to import products further down the supply chain that have more value added by less GHG-intensive manufacturing and assembly. Addressing this concern by expanding the CBAM to include less GHG-



intensive products, would increase administrative complexity. Moreover, cost factors other than the carbon price are likely to be the important determinants of trade flows for products that are not GHG-intensive.

4. Addressing Double Carbon Pricing

Unless exemptions are provided, the CBAM would impose a carbon price on imports of products from countries that also impose a carbon price, with a result similar to double taxation. In such cases, the CBAM would act as a protective tariff rather than equalizing the carbon price on imports and domestic production.

One solution would be to provide a credit for the foreign carbon price borne by imports or to provide an exemption for imports from countries that have a carbon price equal to or greater than the ETS. An alternative approach would be for the exporting country to rebate the carbon price on exports (like the treatment of exports under a value-added tax). The first approach would create an incentive for countries that export to the EU to adopt GHG reduction programs that are equivalent to the ETS; however, it may be viewed as violating the non-discrimination rules of the General Agreement on Tariffs and Trade. If enough countries adopted equivalent GHG measures, carbon leakage would be addressed and the CBAM would have little applicability.

5. WTO Compatibility

The compatibility of carbon border adjustments with the national treatment requirement of the General Agreement on Tariffs and Trade has not previously been adjudicated by the WTO. Care should be taken to design the CBAM to minimize the risk of trade retaliation. There is reason to think that a CBAM can be designed in a way that is consistent with WTO trade disciplines. In particular, Article XX of the General Agreement on Tariffs and Trade (GATT) contains an exception for measures “necessary to protect human, animal or plant life or health” provided they are not arbitrarily applied or covert trade restrictions. Also, a 1987 GATT panel decision determined that a US tax on imports of substances derived from chemicals taxable in the United States did not violate the requirement to provide national treatment to “like” products even though the substances derived from taxable chemicals were not themselves taxable in the United States.³

6. Phase In

In view of the administrative challenges of a CBAM that are discussed above, consideration could be given to phasing in the CBAM, starting with a few products where carbon leakage is most significant. Based on the experience gained with these initial sectors, the CBAM could be expanded to include a larger group of GHG-intensive, trade-exposed sectors.

³ “United States: Taxes on Petroleum and Certain Imported Substances,” Report of the Panel, GATT, BISD 34 Supp. 136 (1987)



For any clarification on this response, please contact me or any of the contacts below. We look forward to discussing any questions you have on the points we raise above. We would welcome the opportunity to contribute to the discussion.

Yours faithfully,

A handwritten signature in blue ink, appearing to read "Stef van Weeghel".

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