

KPMG comments on the European Commission’s Public Consultation on the Carbon Border Adjustment

KPMG¹ member firms in the EU (hereafter “we”) are pleased to respond to the European Commission’s (EC’s) public consultation on a possible Carbon Border Adjustment Mechanism (CBAM)(“the Consultation”). KPMG strongly supports the need to reduce global carbon emissions sharply if the planet is to avoid catastrophic climate change. We have been passionate advocates for action on climate change for well over a decade, including at COP21 in Paris in 2015, and we have been proactively reducing our own emissions since 2007. We support the use of effective carbon pricing systems that reduce emissions efficiently and cost-effectively.

In order to address the pressing need for environmental, social and governance issues to be addressed by business, we have created KPMG IMPACT, which brings together an experienced network of professionals from across the globe to deliver industry-leading practices, research and solutions to address the biggest issues facing our planet. KPMG IMPACT aims to help our clients fulfil their purpose and deliver against the Sustainable Development Goals (SDGs) so that all of our communities can thrive and prosper.

A. Introductory Comments

The Paris Agreement of 2015 was a landmark agreement of the parties to the United Nations Framework Convention on Climate Change (UNFCCC). It aims to keep a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius.

It is widely accepted that greater ambition than that reflected in the Paris Agreement will be needed to achieve these aims. A stocktake and consideration of further measures are set for a Conference of the Parties to the UNFCCC in Glasgow in November 2021.

The EU Emissions Trading System (EU ETS) is one of the largest and longest standing examples of a carbon pricing mechanism in the world today. Any additional measures, such as the proposed CBAM, which improve the effectiveness and rigour of an existing carbon pricing mechanism, seem to be a logical response to reduce and prevent carbon leakage.

The EC’s proposed CBAM, as set out in the Consultation Document:

“ ... would be linked to the pricing of carbon inside the EU, which is regulated for some sectors through the EU Emissions Trading System. ... The mechanism would aim at ensuring equivalent carbon costs between imports and goods produced in the EU.”

The objective of a CBAM is to prevent carbon leakage. This occurs when production is transferred from a jurisdiction with high ambition for emission reductions to other jurisdictions with lower ambition and where products of the high-ambition jurisdiction are replaced by more carbon-intensive imports. If carbon leakage occurs, global emissions will not be reduced, or will be reduced by less than the efforts of the high-ambition jurisdiction, defeating the purpose of the high-ambition jurisdiction in reducing its emissions. If it can be designed well, a CBAM could be replicated across other high-ambition jurisdictions.

However, it needs to be recognised that there is still a debate about the extent of carbon leakage. Some studies have shown that there is little empirical evidence that it occurs, although theoretical, ex ante studies, indicate it is a real risk². There are various explanations for why different types of studies produce differing results, and these are outside the scope of this paper. One reason, though, for the lack of empirical data could be that existing carbon pricing schemes such as the EU ETS mitigate carbon

¹ KPMG is a global organization of independent professional services firms providing Audit, Tax and Advisory services. KPMG operates in 147 countries and territories and has more than 219,000 people working in member firms around the world. Each KPMG firm is a legally distinct and separate entity and describes itself as such. This comment paper is produced on behalf of KPMG member firms located in the EU forming part of KPMG’s Europe, the Middle East & Africa (EMA) region.

² Carbon Leakage: Theory, Evidence and Policy Design.’ *Partnership for Market Readiness Technical Papers*. World Bank, 2015. <https://openknowledge.worldbank.org/handle/10986/22785>; Ferguson, S., Sanctuary, M. Why is carbon leakage for energy-intensive industry hard to find?. *Environ Econ Policy Stud* 21, 1–24 (2019). <https://doi.org/10.1007/s10018-018-0219-8>;

leakage risk by providing exemptions or free certificates to industries which are at risk. Removing such exemptions may result in greater leakage. As any form of CBAM will raise complex issues – administratively, legally and politically – we recommend that a thorough analysis based on compelling empirical data is carried out to determine the real possibility of carbon leakage in any given industry before it is covered by a CBAM.

We set out below some general considerations we consider relevant and comments on the four different alternative mechanisms raised in the consultation. In replying to the questionnaire, we have not responded to questions about which sectors should be included as we believe this should be determined by an in-depth review once there is more clarity about what form the CBAM might take. We have left others blank where we think that none of multiple choices properly reflect our views.

B. General comments

Transportation

The importation of goods into the EU requires transport which raises the question of carbon emissions in that sector. We believe that, typically, the carbon content of the means of transport would be quite low in comparison with the overall footprint of any product. The EC is also already participating in discussions with the International Maritime Organisation (IMO) and the International Air Transport Association concerning emissions reductions in the shipping and aviation sectors and we have assumed that any CBAM would not take into account emissions associated with the means of transport.

Low-income countries

Requiring the reporting and tracking of carbon emissions from various products will likely impose a compliance burden on non-EU producers and countries – which will vary depending upon the current state of regulation in a given jurisdiction. The burden may be considered disproportionate as regards low-income countries (LICs) and consideration should be given to providing special exemptions or extended transitional periods for such countries.

Local carbon taxes and carbon sequestration

Many countries outside the EU have some sort of carbon pricing – whether through an ETS or a carbon tax. We consider that a CBAM could only apply to the difference between the EU carbon price and the price paid on the product in question in order for the regime to be WTO compliant. We note there could be issues in identifying whether a local tax was a carbon tax which should be taken into account – or whether it was to be excluded as not strictly falling within that definition (eg an *ad valorem* fuel duty).

While it is not technically possible at present to abate carbon emissions (ie through filtering) there are various possibilities for carbon capture and usage - which reduce overall emissions in a process. We consider it likely that a CBAM would have to recognise if a non-EU producer used such technology and reduce the CBAM charge accordingly in order to comply with WTO rules.

Interaction with other EU carbon emissions policies and minimizing complexity

There are a number of carbon emissions policies in the EU. The main carbon pricing regime is the EU ETS and the EC is currently consulting on revising the Energy Taxation Directive. It is important that a holistic view is taken so that the various initiatives work together and do not create conflicting drivers or duplication of administration.

Similarly, it is important that any eventual CBAM is designed so as to minimize complexity - in interpretation, application and enforcement – and to maximize certainty for producer and importers.

Sectoral coverage

Given that the purpose of a CBAM and the other options to achieve a carbon border adjustment is to prevent carbon leakage, those sectors that produce goods with high emissions intensities are the relevant candidates. The Consultation Document nominates more than 127 economic activities and processes (Level 3 NACE (rev. 2)) for possible coverage by the CBAM as follows:

- a) Agriculture, forestry and fishing – 13 sectors
- b) Mining and quarrying – 10 sectors
- c) Manufacturing – 95 sectors
- d) Electricity, gas, steam and air conditioning supply – 3 sectors
- e) Water collection, treatment and supply – 6 sectors.

Since compliance and enforcement costs of the CBAM would be substantial, depending upon which design option is selected, a forensic approach would be needed to identify those industries for which carbon leakage could be a major problem. For example, there is a risk of carbon leakage in the importation into the EU of metals such as steel and aluminium from countries whose production processes are more carbon intensive. However, there is much less risk of carbon leakage from the importation of consumer products whose metal content comprises only a small proportion of their landed value, such as personal computers and medical equipment.

The EU already has an EU Carbon Leakage List (PRODCOM) which identifies industries which are vulnerable to competition due to carbon pricing and it is assumed this will be integrated with any CBAM regime.

We suggest the EC considers applying a CBAM or other options to achieve a carbon border adjustment initially only to energy-intensive industries – for example those included in the EU ETS. At a later date, once the regime has been established, it could be extended to other sectors if this proves practical and is in line with the policy of driving reductions in carbon emissions globally.

C. Design options

The Consultation Document identifies four potential design options for a mechanism to achieve the carbon border adjustment, as follows:

- *Design Option #1: Border Tax*: a border tax (or customs duty) on selected carbon intensive products; OR
- *Design Option #2: ETS Extension*: an extension of the *EU Emissions Trading System (ETS)* to imports. This would require the purchasing of emission allowances under the ETS by either foreign producers or importers; OR
- *Design Option #3: Ex-ETS Allowances Pool*: an obligation on foreign producers or importers to purchase allowances from a specific pool, outside the ETS, dedicated to imports. This would mirror the ETS price; OR
- *Design Option #4: Carbon tax (excise or VAT type)*: a new tax imposed at the consumption level on selected products whose production is in sectors that are at risk of carbon leakage. The new carbon tax would apply to EU production, as well as to imports.

We acknowledge the significance of the decision as to which of these design options is most likely to achieve the EU's decarbonisation objectives. The potential impact of each alternative design option on the selected sectors in the EU's trading partners will need to be weighed carefully.

Design Option #1: Border Tax

Design Option #1: Border Tax: a border tax (or customs duty) on selected carbon intensive products.

In commenting on *Design Option #1: Border Tax*, we have considered three practical issues:

- 1.1 Compliance and enforcement;
- 1.2 Setting the rate of the CBAM; and
- 1.3 WTO compliance.

1.1 Compliance and enforcement

A border tax entails the imposition of a domestic tax (ie customs duty) on imports destined for domestic consumption³.

Having settled on a rational and manageable list of sectors that would be subject to the border tax, the next challenge is to establish a workable compliance and enforcement regime.

Customs duty is payable on products within the classifications of the Harmonised System (HS) for classifying goods which is the basis for the EU tariff schedule called TARIC. Besides the customs classification, eight-digit codes are currently used in the EU Carbon Leakage List referred to above (PRODCOM). We understand that a conversion table exists⁴ which maps the product identification numbers from one list to another and assume that this, or a similar approach, would be used under this CBAM option. That way, customs information could be used to identify products which were potentially subject to the border tax.

Once a product which is subject to the tax is identified, three further questions arise:

- a) what is the carbon content of the product;
- b) how can the stated content be verified; and
- c) what procedures are required at the border to verify that a claim for exemption is valid?

a) Identifying the carbon content

As an example, consider the production of aluminium. Many countries producing aluminium have some smelters supplied with coal-fired electricity and others with hydroelectricity.

When a tonne of aluminium arrives at the EU's borders, how will its carbon emissions be measured: based on coal-fired electricity or hydroelectricity or some weighted average of the two depending on the production mix in the originating country? Using a weighted average might be in breach of WTO rules (see the *Appendix* for more detail). However, without the EU tracking that tonne of aluminium back to its originating smelter in order to apply a tax based on the actual emissions, the importer will have a strong incentive to claim its electricity content was produced by hydroelectricity.

The Greenhouse Gas (GHG) Protocol (issued by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD)) sets out how carbon emissions (and other GHGs) are measured. This framework forms the basis of almost every national and sub-national GHG emissions reporting framework used by organizations and businesses to measure and report their carbon emissions around the world. The GHG protocol covers all emissions related to a product (ie Scope 1, Scope 2 and Scope 3 emissions).

Therefore, accepted principles already exist for measuring the carbon intensity of a product.

b) Verification of the carbon content stated

Exporting countries may resist the EU imposing its own compliance and enforcement regime on them, especially if this involved EU inspectors entering those countries and factories.

However, many countries have supplemented the GHG Protocol with local specific requirements (eg local emissions factors) to make the reporting of GHG emissions locally consistent and more accurate. Many also require the audit and verification of this information (the EU ETS is an example of this).

Alignment of any new EU framework with the GHG Protocol and other existing equivalent local measurement and reporting frameworks will reduce any compliance burden and duplication and provide confidence in the underlying carbon emissions of products arriving at the EU border. A key issue here is

³ Report of the Panel, *United States – Measures Affecting the Importation Internal Sale and Use of Tobacco*, ¶ 112, DS44/R (Aug. 12, 1994)

⁴ https://ec.europa.eu/eurostat/ramon/reactions/index.cfm?TargetUrl=LST_REL&StrLanguageCode=EN&IntCurrentPage=3

whether or not there will be global cooperation to achieve such alignment and in the absence of such agreement how will the EU be able to verify the data provided?

c) Border enforcement

Finally, the enforcement at the border could be challenging as the customs officers will assess the border tax based on the TARIC Code (Tariff system of the EU based on the Combined nomenclature) and any special measure codes that need to be specified and implemented at the time of importation. The key question is how the importer could prove the carbon intensity of a product so as to prevent the application of a border tax. To return to the above example of aluminium, while a country of origin may apply a globally accepted methodology to calculate carbon intensity and may have local verification processes in place, how can it be proved that a particular consignment of aluminium came from a particular country, or smelter in that country? Possibilities would include, for example, a self-certificate of the exporter, certification by an authorised third party or self-certification by the importer (for example, as occurs in the area of free trade agreements where country of origin certificates are provided by the importer on a transactional basis to benefit from duty reductions or exemptions).

However, a refund option could be an alternative way. In that case, the effort at the border would be much lower and any refunds after the importation could be proven with the required information and documents. A benefit of such an approach would be that the importer would get the chance to verify the documents which could reduce fraud. It may also act as an incentive for non-EU countries to agree the mechanisms and verifications to obtain a refund.

1.2 Setting the Border Tax rate

In principle, the border tax rate for an imported good should be that which is just sufficient to prevent carbon leakage. This would reflect the domestic levy within the EU on carbon emissions.

The domestic levy on goods produced within the EU is, however, not a fixed rate but a carbon price as determined by the ETS. Consequently, the appropriate rate for the border tax would be required to factor in a floating price not a fixed price.

The practicalities of administering and enforcing the border tax on the basis of a floating domestic carbon price, within the Customs Tariff, appear very significant. The use of an average price, set by the EU, would likely raise issues of compliance with the EU's WTO obligations.

If the Energy Taxation Directive is revised so that it effectively becomes a Carbon Tax Directive, it will also be necessary to consider how the minimum price in such a Directive would affect a tax charge under a CBAM.

1.3 WTO compliance

It is accepted that WTO rules allow members to impose an internal tax on energy commodities such as coal, oil and gas, and apply that same tax on like imported energy commodities. Border adjustment for a customs duty on energy commodities is uncontroversial for imports of those energy commodities.

Border taxes on imports are likely allowed under international trade rules, but the permissibility of border taxes on processes and production methods remains an open debate. It will depend heavily on the specific design and application of the measure, including its level of trade restrictiveness, potential unjustifiable discrimination vis-à-vis trading partners and the effectiveness of the proposed measure in attaining its environmental public policy goals.

To avoid negative trade impacts, we believe EU regulators should:

- a) avoid arbitrary carbon intensity thresholds to set border tax rates;
- b) ensure that administrative rights and obligations are applied equally to domestic and foreign producers; and

- c) avoid unjustified preferential treatment, such as a border tax exemption, for one trading partner over another. Exemptions for LICs are, however, likely to be WTO compliant.

Further details of potential WTO compliance issues are provided in the *Appendix*.

Design Option #2: ETS Extension

Design Option #2: ETS Extension: an extension of the EU ETS to imports. This would require the purchasing of emission allowances under the ETS by either foreign producers or importers.

This design option entails similar challenges as Design Option 1. There would need to be reporting and verification of the specific carbon intensity of the production process in order to calculate the amount of emission allowances an importer would need to purchase.

One advantage would be that there is no floating price to be administered by border authorities.

A significant disadvantage would be the possibility that demand from outside the EU would by design influence – here increase – the carbon price significantly. This could consequently increase production costs in the ETS and the price level in the EU as producers from outside would compete with European producers for a limited amount of emission allowances.

Even if the EU were to issue new certificates to cover current levels of imports, any increase or decrease in the level of imports would affect the EU carbon price and have an unintended impact on the EU's carbon policy.

Without further understanding how the proposal would work, our initial view is that this option may not be practical.

Design Option #3: Ex-ETS Allowances

Design Option #3: Ex-ETS Allowances Pool: an obligation on foreign producers or importers to purchase allowances from a specific pool, outside the ETS, dedicated to imports. This would mirror the ETS price.

This design option entails the same problems as Option 1 (determination and verification of carbon intensity). Unlike Option 2, a dedicated pool would eliminate the issue of competition with EU producers for emission allowances.

Further design options arise around the price determination of the specific pool. One option could be to have a completely independent pool with a separate pricing mechanism.

However, that could result in the carbon price for non-EU producers being very different to the EU price – which we believe could raise WTO issues. The other option would be for the non-EU pool to be a “shadow” pool which would permit the sale of an unlimited number of certificates as and when required at the prevailing EU certificate trading price.

Further consideration would be needed as to how the scheme would work and the potential consequences. For example, could it give a potential advantage to a non-EU producer? If an EU producer wishes to increase its market share it may have to purchase more certificates which could increase their price; whereas under this option the non-EU producer could always purchase at the prevailing price so the expansion plans would not drive up the certificate price.

Design Option #4: Carbon tax on consumption (excise or VAT type)

Design Option #4: Carbon tax (excise or VAT type): a new tax imposed at the consumption level on selected products whose production is in sectors that are at risk of carbon leakage. The new carbon tax would apply to EU production, as well as to imports.

We believe that more detail on this option is needed in order to be able to comment more fully. It is assumed it is intended to be WTO compliant as it would apply to both EU and non-EU production. However, unless it was simply intended as an additional tax on covered products – irrespective of their place of production or actual carbon intensity – it would raise the same issues of determination and verification referred to above. If it was an additional tax, it would also raise the possibility of double or triple

taxation – at least within the EU – where the product was covered by a production process within the context of the ETS and/or was produced by using energy products covered by the (revised) Energy Taxation Directive. Consideration would be needed as to how these different instruments interacted, which is likely to create further complexity.

D. Conclusions

While a CBAM is conceptually an appropriate response to the problem of carbon leakage, designing, implementing and enforcing it will require careful consideration. Identifying the most carbon-intensive products, such as steel, aluminium, cement and glass, is not difficult, but deciding where to draw the line is more challenging. For example, should the CBAM apply only to the energy-intensive industries included in the EU ETS or also to goods containing them? Numerous goods contain some steel or aluminium or other metals whose production processes can be emissions intensive, but the value of those inputs in the final value of the imported product might be very low. Moreover, estimating the emissions associated with imports produced through supply chains in several countries could be difficult.

In dealing with these issues of CBAM coverage, compliance, enforcement and rate setting, care would need to be taken to ensure the EU's compliance with its WTO obligations. These obligations, themselves, would influence the final design option and rate of the CBAM.

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APPENDIX: WTO COMPLIANCE ISSUES

The permissibility under WTO rules of applying a CBAM depends on the interpretation given to relevant WTO provisions, namely, GATT arts. II:2(a) and III:2.

Potential inconsistencies with WTO rules

The use of average EU carbon emission intensities to set the level of CBAM would likely be WTO-inconsistent since it might result, for example, in a higher tax on imported carbon-intensive product such as steel than the EU price imposed indirectly on European-made like product. This could also result in a prohibited subsidy on some exports.

Not allowing foreign producers to use their own carbon intensities to calculate the tax would likely be WTO-inconsistent. EU producers of carbon-intensive goods will most likely be taxed indirectly according to their individual carbon intensities. Not allowing foreign producers to be taxed according to their individual intensities is likely inconsistent with the national treatment obligation in GATT art. III:2.⁵

Any right to petition for a change in a good's CBAM status available to a European producer must be extended to foreign producers too in order for the measure not to violate the national treatment obligation in GATT art. III:4. If domestic producers may petition, foreign producers should be granted a parallel right.

If the CBAM measure provided exemptions for countries enacting a domestic climate policy, this could discriminate between competing imports based on their national origin. This is likely inconsistent with the Most Favoured Nation (MFN) obligation in GATT art. I:1.

The proposed border tax might also violate the MFN obligation if it were to apply specific trade and energy intensity thresholds. Violation might occur if one product meeting the threshold is subject to CBAM and another, like product not meeting the threshold, is not. For example, paper trays and dishes made of bamboo and those made of other materials are considered "like" (competitive) products in international trade. If the CBAM covers bamboo paper plates but not pulpwood paper plates, the CBAM could discriminate between two like products from different foreign countries. This problem is a necessary consequence of establishing a line between goods that are subject to CBAM and those that are not. Any specific cut-off point could generate MFN violations.

Potential Justifications

Most of these potential inconsistencies might be justified under the general exceptions clause, GATT art. XX.

GATT art. XX allows members to pursue legitimate domestic policy objectives that may affect international trade if they are applied in a non-discriminatory manner. One such permissible objective is the conservation of exhaustible natural resources. The CBAM regime is likely acceptable under WTO exceptions because it relates to the conservation of several exhaustible natural resources, such as the atmosphere, it contributes genuinely to the conservation goal and it imposes restrictions equally on the import and the domestic side.

With respect to specific potential WTO violations:

The use of domestic carbon emission averages to calculating the CBAM rate may be justifiable with reference to administrative feasibility if alternative measures are not available. However, to avoid the risk of non-compliance, any CBAM regime should allow importers to show their individual emissions.

Any potential asymmetry in the petition system for a change in a good's CBAM status would be difficult to justify. To avoid violations, the measure should allow for foreign exporters to petition to exclude their products from the scope of the CBAM.

⁵ The European Court of Justice in the context of a border adjustment carbon/energy tax in the *Outokumpu Oy* case agreed with the complainant that Finland's law did not give the opportunity to demonstrate that its electricity was produced by a particular method in order to qualify for the rate applicable to domestic electricity produced by the same method. LUDIVINE TAMIOTTI ET AL., TRADE AND CLIMATE CHANGE WTO-UNEP REPORT 102 (2009).

Potential MFN violations deriving from any exemption system for countries already implementing carbon policies are likely justifiable as non-discriminatory because such a system takes into consideration differing conditions prevailing in different countries.

Arguably, discrimination would occur if the EU were not to allow exemptions. The difference in treatment resulting from the exemption system is neither arbitrary nor unjustified as it relates to the specific efforts made by some members to curb carbon emissions.

Nonetheless, it is important to ensure that the methods used in the exception system are fair in their determination of the level of applicable CBAM.

A possible MFN violation as a result of intensity thresholds could be justifiable because of their relation to the conservation goal. Thresholds that strategically target raw goods where the largest amount of carbon emissions is generated would aim at maximizing the impact of the carbon tax and its conservationist objective.

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