

External Dimension of the Green Deal

Is the Carbon Border Adjustment Mechanism Illegal?

The European Commission announced the “Green Deal” plan to strengthen Europe’s efforts to mitigate climate disruption. Europe has a new goal to become climate-neutral by 2050. Part of the deal is to make the European Emissions Trading System more effective. Due to this approach, the problem of carbon accounting leakage becomes an even bigger concern. In its efforts to prevent this carbon accounting leakage, the European Commission announced that it would establish a Carbon Border Adjustment Mechanism. In July 2021, the Commission proposed a Regulation that would implement a Carbon Border Adjustment Mechanism to prevent carbon accounting leakage. This paper analyzes whether the Carbon Border Adjustment Mechanism is consistent with international law, namely that implemented by the World Trade Organization.

A. Introduction

The European Commission announced the “European Green Deal” back in December 2019. The European Green Deal is a political plan to become the world's first climate neutral continent by 2050.² When it announced the Green Deal, the European Commission included a roadmap by which to achieve that goal.³ Among other legal tools, the roadmap included the objective to propose a carbon border adjustment mechanism (CBAM) for selected sectors in 2021.

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 - 2 COM, COM(2019) 640 final, Communication from the Commission, The European Green Deal, 2.
 - 3 COM, COM(2019) 640 final Annex to the Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions, 2.

To achieve climate neutrality, the European Union passed Regulation (EU) 2021/1119, the European Climate Law (hereinafter, “ECL”) that establishes a “framework for the irreversible and gradual reduction of anthropogenic greenhouse gas (GHG) emissions by sources and enhancement of removals by sinks regulated in Union law” (Article 1, ECL). The objective of climate neutrality is legally binding (Article 1, ECL) as well as the target of a net domestic reduction in GHG emissions by at least 55% compared to 1990 levels by 2030 (Article 4 ECL). To achieve the 2030 and 2050 objectives, the EU proposes new legislation as well as amendments to existing climate, energy and transport-related legislation, altogether called the “Fit for 55 package.”

As part of the Fit for 55 legislation proposal package,⁴ the Commission proposed a regulation that includes a CBAM.⁵ Some states of the world have already voiced objections to the CBAM, calling it protectionism that is in violation of international law. In order to assess whether the CBAM is a legitimate attempt to prevent carbon accounting leakage or illegal protectionism, we will first take a closer look at the European Emissions Trading System (EU ETS).

B. Contexts of Europe’s Emissions Trading System

At the beginning of the 20th century, war was considered to be a solution for the problem of war. After the outbreak of the Great War in 1914, H. G. Wells published a series of articles that became the book, “The War That Will End War.” The title evolved into common usage as “The War to End Wars.” In Europe, this understanding changed after World War II. Europe needed a new and different solution and chose instead to come together as a community, entering first in 1951 into a Treaty establishing the European Coal and Steel Community, and then in 1957, entering into both a Treaty establishing the European Economic Community (EEC) and a Treaty establishing the European Atomic Energy Community. These communities, often using economics as a means to end war, have proven themselves to be more effective solutions than yet another war. Fifty years later however,

4 COM, COM(2021) 550 final, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, 'Fit for 55': delivering the EU's 2030 Climate Target on the way to climate neutrality.

5 COM, COM(2021) 564 final, Proposal for a regulation of the European parliament and of the council establishing a carbon border adjustment mechanism.

Europeans together with all humans face together not only a problem, but a crisis, and not only a crisis for Europe, but for the whole planet: climate disruption. The parties to the United Nations Framework Convention on Climate Change (UNFCCC) and its Kyoto Protocol agreed to limit the rise of GHG emissions which would eventually contribute to global warming. Under Article 17 of the Kyoto Protocol, parties are permitted to participate in emissions trading as “supplemental” means to fulfill quantified emission limitation and reduction commitments under Article 3 of the Kyoto Protocol. Somehow, in the intervening years since Kyoto was signed and then ratified, it seems that many industries and states have mistakenly come to believe that a purpose of the Kyoto Protocol was to establish emissions trading, failing to note its supplemental nature and the legal requirement to limit and reduce emissions.

Enabled by the Kyoto Protocol, the EU ETS was born. The EU ETS, like the European Communities themselves, has an explicit goal. While the purpose of the Communities was to prevent war (see, for example, Art. 2 EEC, Art. 3 TFEU), the purpose of the EU ETS is to mitigate emissions, according to Art. 1 of Directive 2003/87/EC. The means to prevent war and to mitigate emissions has been economic. The means is not the end.

Although the EU’s ETS cap-and-trade system does cover combustion installations (mainly power stations), which are responsible for 60% of EU ETS emissions, the EU’s ETS only covers about 36% of the EU’s total GHG emissions. Nevertheless, as a legal measure, the EU ETS was and still is Europe’s flagship to limit GHG emissions and, consequently, limit climate disruption. To understand why and how carbon accounting leakage occurs and why the EU needs the CBAM, it is helpful to review the changes needed in the EU ETS since it began in 2005.

Its first period led to a high amount of surplus emission allowances due to a high cap. The worldwide finance crisis then caused a decrease in the global production of commodities and emissions as well as an increase of international credit use in the EU ETS.⁶ In the first two trading periods (2005–2007 and 2008–2012), each country set its own cap and the overall European cap was then the sum of the national emission caps. For all these reasons, but especially the unambitious level of the cap, the carbon price fell from 2011 to 2017.⁷ This changed with the reform of the EU ETS in 2017. A Europe-wide emissions cap totaling 15.6 billion emission allowances was

6 Umweltbundesamt, Der europäische Emissionshandel, <https://www.umweltbundesamt.de/daten/klima/der-europaeische-emissionshandel#teilnehmer-prinzip-und-umsetzung-des-europaeischen-emissionshandels> [14 Feb 2022].

7 Ibid.

set for the third trading period of the EU ETS (2013-2020). These allowances were distributed over the eight years of the trading period, but not evenly. Rather, the quantity is reduced by around 38 million allowances each year. This results in a decreasing course of the cap. This surplus was gradually reduced through so-called “backloading” (withholding of emission allowances earmarked for auctioning) in 2014 to 2016 and from 2019 through the Market Stability Reserve (MSR).

In 2020, emissions from ETS installations across the EU28⁸ as well as Liechtenstein, Island, Norway fell by around 12% year-on-year to around 1.35 billion metric tons of carbon dioxide equivalents (CO₂ eq), according to the European Commission.⁹ Similar to the emissions trend in the EU, the approximately 1,817 German plants covered by emissions trading also recorded a drop in emissions. At 320 million metric tons of CO₂ eq., emissions in Germany in 2020 were approximately 12% lower than in the previous year.¹⁰ The main reason for this development was a decline in emissions from electricity generation. There was no substantial change in emissions from industrial plants as a whole.¹¹ Over a longer period of time, however, ETS emissions across Europe have declined more sharply than in Germany. While emissions from installations in Germany have fallen by approximately 38% since the start of emissions trading in 2005, ETS emissions across Europe were approximately 43% below the 2005 baseline.¹² However, the decline in emissions slowed across Europe between 2013 and 2020. In 2020, emissions were approximately 29% below the 2013 level.¹³ In Germany, emissions declined by approximately 33% over the same period.¹⁴ The emission cap for the EU ETS in 2020 has already been met or even undercut in all years since 2014.¹⁵

The current version of the EU ETS aims to deliver a 43% reduction in EU ETS emissions by 2030 compared to 2005, consistent with an EU economy-wide emissions reduction target of at least 40% by 2030 compared

8 The UK was part of the EU ETS until 31 December 2020.

9 Umweltbundesamt, Der europäische Emissionshandel, <https://www.umweltbundesamt.de/daten/klima/der-europaeische-emissionshandel#teilnehmer-prinzip-und-umsetzung-des-eur-opaischen-emissionshandels> [14 Feb 2022].

10 Ibid.

11 Ibid.

12 Ibid.

13 Ibid.

14 Ibid.

15 Ibid.

to 1990.¹⁶ More recent analysis by the Commission services have shown that if the legislation would remain unchanged, the sectors currently covered by the EU ETS would instead achieve emission reductions of 51% in 2030 compared to 2005.¹⁷

C. Introduction of a Carbon Border Adjustment Mechanism

With the “Fit for 55” proposed legislation package, the Commission aims to revise all relevant instruments of climate legislation where necessary to deliver on the legally binding reduction targets. Part of this package amends the emissions trading system. The new 2030 target for ETS emissions is -61% (from -43%) compared to 2005. Furthermore, a larger linear reduction factor (the factor by which the overall emissions cap of the ETS is reduced yearly) of 4.2% cut to ETS emissions cap every year was proposed.¹⁸ Since 2021, the linear reduction factor reduces the cap emissions by 2.2% annually. Additionally, the proposed legislation requires the EU Member states to spend ET revenue on climate and energy projects. Moreover, under the proposed legislation, the EU ETS shall be extended to other sectors, namely maritime and road transport as well as buildings. More important, the greater mitigation goal leads to a more stringent cap on emissions, meaning that the overall number of allowances available will decline. A more stringent cap signals a higher carbon price. The EU objective of climate neutrality and the decision to further mitigate emissions by 2030 led to a broader reconsideration of existing measures against the risk of carbon accounting leakage. The CBAM is one of these measures.¹⁹

The risk of so-called “carbon leakage,” which is in fact carbon accounting leakage, not a leakage of carbon itself, occurs when companies based in

16 COM, COM(2021) 551 final, Proposal for a Directive of the European Parliament and of the Council amending Directive 2003/87/EC establishing a system for greenhouse gas emission allowance trading within the Union, Decision (EU) 2015/1814 concerning the establishment and operation of a market stability reserve for the Union greenhouse gas emission trading scheme and Regulation (EU) 2015/757, p. 1.

17 Ibid.

18 COM, COM(2021) 551 final, Proposal for a Directive of the European Parliament and of the Council amending Directive 2003/87/EC establishing a system for greenhouse gas emission allowance trading within the Union, Decision (EU) 2015/1814 concerning the establishment and operation of a market stability reserve for the Union greenhouse gas emission trading scheme and Regulation (EU) 2015/757.

19 COM, COM(2021) 564 final, Proposal for a Regulation of the European Parliament and of the Council establishing a carbon border adjustment mechanism, 1.

countries with a high carbon price could move carbon-intensive production abroad to take advantage of laxer carbon standards in other countries.²⁰ Products from countries with a high carbon price could be replaced by imported products that emitted more carbon and equivalents when made abroad. As a consequence, the same products are available on the European market, but more carbon equivalents were loaded to the atmosphere during production and shipping. Rather than reducing emissions, this phenomenon simply shifts the emissions outside of Europe and therefore seriously undermines European carbon reduction efforts. Additionally, European domestic emissions producers face costs of local emissions-reduction requirements while competing with imported products produced in countries where the manufacturers pay a minor or no price at all for emitting GHG.²¹

The European Commission made it clear in its proposal for a Regulation to the European Parliament and of the European Council, in which it establishes a CBAM, that the objective of the CBAM is to address this exact problem and to reduce the risk of carbon accounting leakage that could occur due to Europe's objective of a climate-neutral EU by 2050.²² At the moment, the risk of carbon leakage in the covered sectors is managed through the granting of free allowances and compensations for the increase in electricity costs under state aid rules. Manufacturing industries, aviation and – at least in some member states - electricity production facilities receive a share of their emission allowances for free. The Commission's proposal sets out to introduce a CBAM that continues with a planned (temporary) continuation of free allocation within the framework of the EU ETS. The Commission proposed a ten years phasing-in period starting in 2026, during which time the free allocations of allowances under the EU ETS would be gradually phased out by ten percentage points each year and the CBAM would be phased in. During this phasing-in period, the CBAM would be reduced proportionally to the amount of free allowances distributed in a given sector.

As a part of an impact assessment, the European Commission considered different options for the construction and implementation of a CBAM.²³ The Commission decided upon Option 4, which means introducing a carbon adjustment on imports for which CBAM certificates must be bought. However, this option considers also a gradual implementation

20 *Babiker*, *Journal of International Economics* 2005, p. 421, 422.

21 *Bullock*, *Washington International Law Journal* 2018, p. 609, 623.

22 COM, COM(2021) 564 final, Proposal for a Regulation of the European Parliament and of the Council establishing a carbon border adjustment mechanism, 1.

23 COM, SWD(2021) 643 final, Impact Assessment Report, 45.

period of ten years, starting in 2026, during which the free allocations of allowances under the EU ETS would be gradually phased out by ten percentage points each year and the CBAM would be phased in. During this phasing in period, the CBAM would be reduced proportionally to the amount of free allowances distributed in a given sector (Art. 1 para. 3).²⁴ During the impact assessment, this option has shown itself to be most effective to reduce carbon leakage up to 29%.²⁵ The free allocation will include new actors using low-carbon technologies.

Article 1 para. 1 and Annex 1 establish a CBAM on cement, iron and steel, aluminum, fertilizer and electricity, upon their importation into the customs territory of the Union.²⁶ In light of the fact that goods from energy-intensive, trade-exposed sectors such as cement, steel and aluminum are the most likely to be impacted by carbon accounting leakage,²⁷ the choice of sectors to be included is reasonable.

The CBAM will be introduced in two phases (Art. 36).²⁸ The first phase, the transitional phase, will start in 2023. Importers must report emissions created with the production of their goods (called “embedded” emissions) (Art. 7) without paying a financial adjustment (Art. 36 lit. 3d), until the time when the final system is put in place. This phase will finish at the end of 2025. In cases where this carbon emission information is not available as the goods are being imported, EU importers will be able to use average sectoral reference values (even once the definitive system has begun) on CO₂ emissions. These values are called “CO₂ benchmarks” for the respective product category to determine the number of certificates the importer needs to purchase. Importers will nevertheless be able to demonstrate actual emissions during a reconciliation procedure, and surrender the appropriate number of CBAM certificates accordingly.

As of 2026, EU importers of goods covered by the CBAM will be required to register with national authorities where they can also buy CBAM certificates (Art. 6). The price of the certificates will be calculated depending on the weekly average auction price of EU ETS allowances expressed in € /

24 COM, COM(2021) 564 final, Proposal for a Regulation of the European Parliament and of the Council establishing a carbon border adjustment mechanism, 9.

25 COM, Commission Staff Working Document, Impact Assessment Report, Part 1/2, SWD(2021) 643 final, 48.

26 COM, COM(2021) 564 final, Proposal for a Regulation of the European Parliament and of the Council establishing a carbon border adjustment mechanism.

27 *Monjon/Quirion*, Ecol. Econ. 2011, p. 1957, 1970.

28 COM, COM(2021) 564 final, Proposal for a Regulation of the European Parliament and of the Council establishing a carbon border adjustment mechanism.

ton of CO₂ emitted (Art. 20, 21). The EU importer must declare by May 31 each year the quantity of goods and the embedded emissions in those goods imported into the EU in the preceding year. At the same time, the importer will surrender the number of CBAM certificates that corresponds to the amount of GHG emissions embedded in the products. If importers can prove, based on verified information from third country producers, that a carbon price has already been paid during the production of the imported goods, the corresponding amount can be deducted from their final bill (Art. 9). National authorities will authorize registration of declarants in the CBAM system, as well as review and verify declarations. National authorities will also be responsible for selling CBAM certificates to importers. If an importer does not have enough CBAM certificates, the competent authority will notify the authorized declarant of the adjustment and request that the authorized declarant surrender the additional CBAM certificates within one month. As a result, the CBAM instrument should not only prevent carbon accounting leakage, but also replace the free allocation of allowances in the EU ETS.

D. The Claim of the CBAM Being Illegal

While the EU is concerned about carbon accounting leakage and therefore proposed to introduce a CBAM, some non-EU states are concerned about the CBAM. In April 2021, the 30th Ministerial Meeting on Climate Change was held by Brazil, South Africa, India and China (the ‘BASIC’ states). In a joint statement, the Ministers of the states “expressed grave concern regarding the proposal for introducing trade barriers, such as unilateral carbon border adjustment, that are discriminatory and against the principles of Equity and CBDR-RC.”²⁹

To address this allegation, the most important question is which body has the power to decide that the proposed CBAM is illegal. Among international fora, the International Court of Justice might decide if the CBAM is illegal. In Europe, the European Court of Justice could decide that the CBAM does not conform with European Law. This could be of concern for those who are affected by the CBAM, such as daughter companies from the BASIC states or European companies which trade with the BASIC states.

29 South African Government, Joint Statement issued at the conclusion of the 30th BASIC Ministerial Meeting on Climate Change hosted by India on 8th April 2021, <https://www.gov.za/nr/speeches/joint-statement-issued-conclusion-30th-basic-ministerial-meeting-climate-change-hosted> [14 Feb 2022].

Concerning the fact that a natural or legal person may bring an action for annulment of an act (Article 263 para. 4 TFEU) which is not a decision addressed to that person only if the person is not only directly concerned by such an act but also individually concerned by it (Plaumann-Formula),³⁰ this is not very likely. In this regard, an action for annulment of an act brought by a member state (Article 263 para. 2 TFEU) could be more relevant as the member states do not have to meet the strict requirements of the Plaumann-Formula. The governments of Poland,³¹ Bulgaria and Romania already have expressed concerns about the introduction of a carbon adjustment.³²

For the European Parliament as well as the European Commission, the most important question is, however, whether the CBAM is compatible with the rules of the World Trade Organization (WTO).³³ Any member state of the WTO can go to the WTO's adjudicatory forum, the Dispute Settlement Body (DSB). Consequently, the European Commission has stated that the CBAM "should prevent the risk of carbon leakage and support the EU's increased ambition on climate mitigation, *while ensuring WTO compatibility*."³⁴ Therefore, this paper focuses on the question whether the CBAM is consistent with the WTO law.

I. The WTO and its Appellate Body Process

If a WTO member state believes that a newly implemented trade measure, such as the introduction of the CBAM, is inconsistent with the WTO law,

30 ECJ, C-583/11 P, Inuit Tapiriit Kanatami et al, 03 Oct 2013, para. 75.

31 Republic of Poland, Ministry of Climate and Environment, Minister Moskwa in Katowice: work on the CBAM mechanism as an opportunity to discuss the whole ETS system, 29 Nov 2021, <https://www.gov.pl/web/climate/minister-moskwa-in-katowice-work-on-the-cbam-mechanism-as-an-opportunity-to-discuss-the-whole-ets-system> [14.02.2022]; Consistent with this position, Poland, which relies on coal for nearly eighty percent of its electricity, opted out of the initial introduction of the Green Deal, see The Guardian, European Green Deal to press ahead despite Polish targets opt-out, 13 Dec 2019, <https://www.theguardian.com/environment/2019/dec/13/european-green-deal-to-press-ahead-despite-polish-targets-opt-out> [14 Feb 2022].

32 Imeri/Barzilska, Challenges for the planned carbon border tax measures in the EU, 09 Nov 2021, <https://ihsmarkit.com/research-analysis/challenges-for-the-planned-carbon-border-tax-measures-in-the-eu.html> [14 Feb 2022].

33 COM, COM(2021) 564 final, Proposal for a Regulation of the European Parliament and of the Council establishing a carbon border adjustment mechanism, 2; European Parliament, resolution of 10 March 2021 Towards a WTO-compatible EU carbon border adjustment mechanism.

34 COM, COM(2021) 564 final, Proposal for a Regulation of the European Parliament and of the Council, establishing a carbon border adjustment mechanism, 16 (emphasis added).

it may bring the complaint to the DSB, which may decide to establish a Panel to resolve the dispute, according to Dispute Settlement Understanding (DSU),³⁵ Article 6. Before the decision is made, a member state may not establish sanctions through tariffs or duties. Only signatory states of the WTO (and not individuals) can take an action before the DSB for a settlement of disputes between Members and the DSB then makes a determination according to the rights and obligations provided in Article 1 Sec. 1, Article 2 Sec. 1 and the agreements in Appendix I of the WTO's Understanding on Rules and Procedures Governing Settlement. A dispute appears where a member government believes another member government is violating an agreement or a commitment included in Appendix I of the WTO's Understanding on Rules and Procedures governing settlement. Appeals from DSB determinations, based on points of law, may then be taken to an Appellate Body of the WTO.

The proposed CBAM option would be consistent with the provisions of the WTO Agreement if it meets the criteria set out in GATT Article II and III. The EU's proposal must be border adjustable according to the GATT provisions and must not violate the National Treatment provisions (GATT Article III) or the (prohibition on) Most Favored Nation(s) principle (GATT Article I). GATT Article I forbids the most-favored-nation treatment. Therefore, the CBAM cannot discriminate between like products imported from different countries, e.g. between aluminum from Canada versus the like aluminum from the US.³⁶

Under GATT Article II, the EU cannot exceed a maximum rate of import tariffs. For example, a carbon adjustment on imported steel, if construed as an import tariff could exceed the EU's tariff on steel.³⁷ However, GATT Article II:2(a) explicitly allows, for a "border tax adjustment," that is, an import "charge equivalent to an internal tax ... in respect of the like domestic product [here, EU steel] or ... an article [e.g. steel inputs] from which the imported product has been manufactured or produced in whole or in part."³⁸ On this ground, certain carbon levies on imports "equivalent" to a domestic carbon "tax" could be justified.³⁹

GATT Article III establishes the national treatment rule. The EU committed to non-discrimination (either *de jure* or *de facto*) against imported

35 See: https://www.wto.org/english/tratop_e/dispu_e/dsu_e.htm.

36 European Parliament, Briefing, Trade Related Aspects of a Carbon Border Adjustment Mechanism. A Legal Assessment, 6.

37 Ibid.

38 Ibid.

39 Ibid.

products as compared to like EU products. For example, a tariff on cement imported from China must not be construed as a tariff (on imports only) but as part of, or equivalent to, an indirect tax or regulation on both domestic and imported cement only to ensure a “level playing field.”⁴⁰ And finally, GATT Article XI could be violated if the EU CBAM was not seen as an import tariff or duty, nor as an internal tax or regulation, but rather as a border restriction that limits the quantity of imports.⁴¹

Therefore, the answer to the question of whether the CBAM is illegal would seem to be decided by determining whether the CBAM is a tax in the meaning of the GATT and whether the CBAM would result in a discrimination between like imports from different countries and whether there is an “arbitrary or unjustifiable discrimination” between countries.

1. Is the CBAM a Tax?

The Commission has proposed that importers of the goods covered by the CBAM must buy a CBAM certificate that is equal to the EU ETS certificates. As proposed, the CBAM would end the current granting of free allowances in the EU ETS. Therefore, the two instruments are very much connected and observations on legal matters related to the EU ETS affect the proposed CBAM.

To be consistent with the WTO law, the EU ETS can be adjusted on imports based exclusively on competitiveness concerns, if it can be construed either as an “internal tax or other internal charge of any kind [...] applied, directly or indirectly, to [...] [EU] products [e.g. energy used or cement produced in the EU],” or a law, regulation or requirement “affecting ... [an EU product’s, e.g. EU energy’s or cement’s] internal sale, offering for sale, purchase, transportation, distribution or use.”⁴² Neither the introduction of a CBAM nor the EU ETS could be characterized as an internal tax if they were to be seen as a toll on emitting GHG emissions. For the EU ETS, research has shown that the certificates are not a toll.⁴³ GATT Art. III states that not only indirect “taxes or other charges” but also internal regulations (sufficiently related to the sale, purchase or use of a product or input) can be adjusted on imports.⁴⁴ The goal of the EU ETS – and of the CBAM – is to reduce GHG emissions. Both instruments are achieving

⁴⁰ Ibid.

⁴¹ Ibid.

⁴² Ibid, 8.

⁴³ *Merkel*, ZUR 2020, p. 658, 662.

⁴⁴ European Parliament, Briefing, Trade Related Aspects of a Carbon Border Adjustment Mechanism. A Legal Assessment, 9.

this goal by imposing additional costs on emitting GHG emissions. But neither instrument obliges companies within their scope to fulfill specific technical requirements. The incentive to meet certain efficiency standards, however, is not a technical regulation.⁴⁵ Companies are still free to decide on whether and how to reduce GHG emissions. This favors characterizing the CBAM as an internal tax. An internal EU carbon tax can be adjusted simply by applying it at the point of sale or consumption in the EU. An internal regulation can only be adjusted for imports by applying the same or an equivalent regulation on those imports.⁴⁶

2. Discrimination between Like Imports from Different Countries

The traditional “border tax adjustment” operates on the basis of the destination principle: domestic consumption, including imports, is taxed and exports are rebated.⁴⁷ To determine a discrimination, compare the CBAM on “Like” Domestic Products. The adjustment cannot impose a heavier burden on imports as compared to “like” domestic products. A de facto discrimination could be avoided by imposing the average carbon price levied on EU products on imports of the same products from non-EU countries. As was noted above, this is in fact the case with the proposal. EU importers of goods covered by the CBAM will buy CBAM certificates; the price of the CBAM certificates will be calculated depending on the weekly average auction price of EU ETS allowances expressed in € / ton of CO₂ emitted. Therefore, by using the EU group average, de facto group equality can be ensured. Furthermore, the proposal sets out to adjust the carbon price on imports with reference to the price already paid in the country of production. In summary, the proposed CBAM will ensure equal treatment for products made in the EU and imports from elsewhere.

3. “Arbitrary or unjustifiable discrimination” between countries

The CBAM must also be applied in a way that does not amount to ‘arbitrary or unjustifiable discrimination between countries where the same conditions prevail’.⁴⁸ For example, exempting least developed countries (LDCs) could be seen as discriminatory,⁴⁹ but could be justified on environmental

45 *Merkel*, ZUR 2020, p. 658, 662.

46 European Parliament, Briefing, Trade Related Aspects of a Carbon Border Adjustment Mechanism. A Legal Assessment, 8.

47 *Ibid.*, 10.

48 *Ibid.*, 11.

49 *Ibid.*

grounds, because LDCs historically have emitted far less than developed countries.⁵⁰ In its proposal, the Commission has however not suggested an exception, but instead promises that the EU stands ready to work with low and middle-income countries towards the decarbonization of their manufacturing industries.⁵¹

Even if any of the WTO rules were found to be violated, the health and environmental exceptions provided in GATT Article XX can justify such violation on condition that the import adjustment is a measure “necessary to protect human, animal or plant life or health” (GATT Article XX(b)) or “relating to the conservation of exhaustible natural resources” (and “made effective in conjunction with restrictions on domestic production or consumption”) (GATT Article XX(g)), and “not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail” or “a disguised restriction on international trade” (the so-called “chapeau” of GATT Article XX).⁵²

The Asbestos WTO case No. 135. (2001) EC⁵³ is a good example. In that case, Canada challenged France’s import ban on asbestos products. Pursuant to paragraphs (b) and (g) of Article XX, WTO members may adopt policy measures that are inconsistent with GATT disciplines, but necessary to protect human, animal or plant life or health (paragraph (b)), or relating to the conservation of exhaustible natural resources (paragraph (g)). WTO members’ autonomy to determine their own environmental objectives has been reaffirmed a number of times, such as in the case of the US regarding gasoline⁵⁴ and in the case of Brazil regarding retreaded tires.⁵⁵

In order for a trade-related environmental measure to be eligible for an exception under Article XX, paragraphs (b) and (g), a member must establish a connection between its stated environmental policy goal and the measure at issue. The measure must be either necessary for the protection of human, animal or plant life or health (paragraph (b)) or relating to the conservation of exhaustible natural resources (paragraph (g)). To determine whether a measure is “necessary” to protect human, animal or plant life or

50 The United Nations Conference on Trade and Development (UNCTAD), Smallest footprints, largest impacts: Least developed countries need a just sustainable transition, <https://unctad.org/topic/least-developed-countries/chart-october-2021>, [14 Feb 2022].

51 COM, COM (2021) 564 final, Proposal for a Regulation of the European Parliament and of the Council establishing a carbon border adjustment mechanism, 23.

52 European Parliament, Briefing, Trade Related Aspects of a Carbon Border Adjustment Mechanism. A Legal Assessment, 10.

53 WTO, WT/DS135/12, Canada v. European Communities, 11 April 2001.

54 WTO, WT/DS2/9, United States v. Brazil, 20. May 1996.

55 WTO, WT/DS332/AB/R, European Communities v. Brazil, 3 Dec 2007.

health under Article XX(b), a process of weighing and balancing a series of factors has been used by the Appellate Body.

In the WTO case no. 135 (2001), both the Panel and upon review, the Appellate Body, rejected Canada's claim and found there was no reasonably available alternative to a trade prohibition. The measure was clearly designed to achieve the level of health protection chosen by France and the value pursued by the measure was found to be "both vital and important in the highest degree."⁵⁶ The Appellate Body made the point that the more vital or important the common interests or values pursued, the easier it was to accept the measures designed to achieve those ends as being necessary.

The reports of the Intergovernmental Panel on Climate Change have shown that stopping climate disruption is one of the most important challenges of humans. The WTO's own Appellate Body has stated that "a policy to reduce the depletion of clean air was a policy to conserve a natural resource within the meaning of Article XX(g)."⁵⁷ Even if calibrating the border adjustment to the carbon cost already paid in the country of origin may involve a form of discrimination, it is arguably justified and not arbitrary since it is based on environmental grounds. Thus, even if the WTO found the proposed CBAM to be a violation of its rules, the violation could be seen as justified.

As concerns discrimination, a problem remains for the BASIC states as well as the developing countries of the Global South. Economic research has shown that the economic risk of certain sectors contracting is highest in the Global South and non-EU Eastern Europe, with the highest relative risks in both scenarios being found on the African continent.⁵⁸ The proposed CBAM does not make an exemption for developing countries. Instead, the Commission emphasizes to "support less developed countries with the necessary technical assistance in order to facilitate their adaptation to the new obligations established by this regulation."⁵⁹ Though an exception can be seen as a discrimination of like products between countries, it can be justified.⁶⁰ Against the goal of carbon neutrality, developing countries assert their right to develop.⁶¹ Given the foregoing, the EU might therefore need

56 WTO, WT/DS135/AB/R, *Canada v. European Communities*, 12 March 2001, 172.

57 WTO, WT/DS2/9, *Venezuela et al. v. USA*, 20. May 1996, p. 14.

58 *Eicke et al*, *Energy Research & Social Science* 2021, 8.

59 COM, COM (2021) 564 final, Proposal for a Regulation of the European Parliament and of the Council establishing a carbon border adjustment mechanism, 23.

60 See D.I.3.

61 See, United Nations, Declaration on the Right to Development at 25, <https://www.un.org/en/events/righttodevelopment/background.shtml> [14 Feb 2022].

to adjust the proposal in light of the principle of Common but Differentiated Responsibilities and Respective Capabilities, included in Article 2, paragraph 2 of the Paris Agreement, by introducing exceptions or at least specific and concrete instruments to support developing countries.⁶²

II. Consequences of a violation

In the alternative, one must however also consider what would happen if the WTO dispute settlement body were to find a WTO violation. First, any remedy provided is purely prospective and second, the remedies exclude monetary compensation (Article 3 Sec. 7, DSU). Therefore, the EU could be compelled to change its mechanism with effect only after an adverse WTO ruling and a reasonable period of time to implement the remedy, which usually takes several years. The EU can also decide to keep any violation in place and instead conclude mutually agreed solutions with other countries, or accept to suffer equivalent trade retaliation.

At the time of writing, the USA is blocking the appointment of new Appellate Body members, thus making it not likely that a final decision could be expected soon, were an action to be brought to the WTO. First-level panels remain available, but adoption of their reports may now be blocked simply by filing an appeal (to a body that no longer exists and can hence not complete the appeal).

On the one hand, the potential to block adverse WTO rulings (by appealing “into the void”) could be seen as a weakening of the constraining power of the WTO, but on the other hand, the threat of a dysfunctional WTO dispute settlement system means that countries who consider the CBAM to be an illegal trade measure have no other alternative. Among other members of the WTO, the EU agreed to put in place contingency measures to replace the WTO Appellate Body for the time that it is not functional.⁶³ Additionally, it is important that the CBAM is consistent with the WTO law as the effectiveness of the CBAM – and EU’s climate legislation

62 European Institute for Asian Studies (EIAS), Mitigating Opposition to the Carbon Border Adjustment Mechanism: Engaging BRICS and the Global South, 21 Sept 2021, <https://eias.org/op-ed/mitigating-opposition-to-the-carbon-border-adjustment-mechanism-engaging-brics-and-the-global-south/> [14 Feb 2022].

63 Statement by Ministers, Davos, Switzerland, 24 January 2020, https://trade.ec.europa.eu/doclib/docs/2020/january/tradoc_158596.pdf [14 Feb 2022].

and ambitions in general – depend on the “robustness of the carbon price mechanism to legal and political challenges.”⁶⁴

III. Anticipated answer

From the above, it can be seen that the EU has taken considerable effort to ensure that there is no violation. Even if a violation was found, there is good reason to believe it would also be found to be justified. The former WTO appellate officer Jennifer Hillman said about carbon adjustments: “provided that policymakers carefully design a [carbon] tax, keeping in mind the basic requirements of the WTO not to discriminate in favor of domestic producers or to favor imports from certain countries over others [...] the threat of WTO challenges should not present a barrier to policymakers wishing to adopt a carbon tax system now.”⁶⁵ It appears that the proposed CBAM meets these requirements.

IV. Remaining problems

Although one may conclude that there are good reasons that the Dispute Settlement Body will not find a violation, or even if it were to find a violation, that it can be justified for environmental reasons, there still remain problems and questions with the proposed CBAM.

1. Monetizing Social Costs

The first of the remaining problems is the monetizing of social costs. The EU ETS has a justifiable purpose and the CBAM was introduced to reinforce this purpose. Both the EU ETS and the CBAM will reduce GHG emissions in a cost-effective manner and both serve to internalize external costs.⁶⁶ The economics of cost-benefit analysis had for years failed to internalize the costs of carbon, not all of which can be monetized. And even when costs can be monetized, there are other superior value issues to consider.

64 *Ismer/et al.*, Border carbon adjustments and alternative measures for the EU ETS: An evaluation, 6.

65 *Hillmann*, Changing Climate for Carbon Taxes: Who's Afraid of the WTO?, p. 2.

66 COM, COM(2021) 551 final, Proposal for a Directive of the European Parliament and of the Council amending Directive 2003/87/EC establishing a system for greenhouse gas emission allowance trading within the Union, Decision (EU) 2015/1814 concerning the establishment and operation of a market stability reserve for the Union greenhouse gas emission trading scheme and Regulation (EU) 2015/757, 8.

For example, when the Kyoto Protocol was established, the USA calculated the costs to its economy to observe the Kyoto Protocol compared to the monetized “cost” of human loss of life and suffering due to climate disruption elsewhere and concluded it would cost the US more to follow the Kyoto Protocol, so it did not do so.⁶⁷ We can learn from this that climate answers are not found only through economics and natural science. Hence the need for law to incorporate other evaluations to achieve justice. The error of carbon markets is a failure to reach this goal. “International carbon markets are an appealing and increasingly popular tool to regulate carbon emissions. They put a price on carbon emissions and make pollution less attractive for regulated firms. However, carbon markets often produce prices which are deemed too low relative to the social cost of carbon.”⁶⁸

2. EU Cannot Fix Climate Disruption Alone

As discussed above, the CBAM serves the purpose of preventing carbon leakage and ending the free allocation of certificates within the EU ETS. The impact assessment has shown that the option for a CBAM that the Commission decided upon is the most effective for this goal.⁶⁹ It may be more effective if the EU worked together with other states. The Bertelsmann Foundation found that the higher the price of a potential carbon adjustment, the more likely that carbon leakage would occur, if the EU introduces it alone.⁷⁰ At a price of 100 USD/t CO₂, carbon leakage would rise up to nearly 15 percent. But if the EU worked together with the USA, for example, the rate of carbon leakage would be flattened to approximately 6 percent. The effect would become even stronger if the EU, the USA and China introduced a carbon adjustment together. The rate of carbon leakage could be reduced to 2 - 3 percent. And whereas a “climate club” of this three would lead to a reduction of GHG emissions at a level of 30 percent, if the EU alone introduces a carbon adjustment, it would reduce global GHG emissions only by 2,7 percent.⁷¹

67 Brown, *American Heat*, 167.

68 Bayer/Aklin, PNAS 2020, p. 8804, 8804.

69 COM, Commission Staff Working Document, Impact Assessment Report, Part 1/2, SWD(2021) 643 final, 48.

70 Bertelsmann Stiftung, FactSheet, CO₂-Bepreisung, p. 11, Figure 13, [https://www.bertelsmann-stiftung.de/fileadmin/files/user_upload/MT_Factsheet_CO₂_Bepreisung_2021_DT.pdf](https://www.bertelsmann-stiftung.de/fileadmin/files/user_upload/MT_Factsheet_CO2_Bepreisung_2021_DT.pdf) [14 Feb 2022].

71 Bertelsmann Stiftung, FactSheet, CO₂-Bepreisung, p. 11, Abbildung 13, [https://www.bertelsmann-stiftung.de/fileadmin/files/user_upload/MT_Factsheet_CO₂_Bepreisung_2021_DT.pdf](https://www.bertelsmann-stiftung.de/fileadmin/files/user_upload/MT_Factsheet_CO2_Bepreisung_2021_DT.pdf) [14 Feb 2022].

Additionally, a bi- or multilateral approach would have the benefit that the states included would be able to mitigate the risk of retaliation by acting as an economic bloc.⁷² The introduction of a multilateral CBAM could be linked with the bottom-up approach of the Paris Agreement and strengthen the cooperation of the Paris signatory states in their shared objective to reduce GHG emissions against recalcitrant states.⁷³

E. Conclusions

From speculative interpretation of the GATT language and from empirical observation of WTO prior Dispute Settlement decisions, one may conclude that the Dispute Settlement Body and the Appellate Body would not find the proposed CBAM to be “illegal.” Even if a violation was found, there are good reasons to believe it would be found to be justified on environmental grounds. But the most important question remains to be answered, and that is whether the CBAM will help Europe to reduce net GHG emissions to zero and keep global temperature rise below 1.5 degrees C. The European Commission promised nothing less. Their impact assessment and economic research have shown that a carbon adjustment can reduce carbon leakage. But if the EU alone introduces this instrument, it will not have a great impact on the global emissions. Thus to achieve the ultimate goal of zero net emissions, the EU and large emitting states like the US and China must work together, not individually. As it is, the CBAM might be a first step in carbon reduction, or it might just mean more emissions trading business.

Literature

- Babiker*, Climate Change Policy, Market Structure, and Carbon Leakage, *Journal of International Economics* 2005, pp. 421.
- Bayer/Aklin*, The European Union Emissions Trading System reduced CO2 emissions despite low prices, *Proceedings of the National Academy of Science USA (PNAS)* 2020, pp. 8804.
- Bertelsmann Stiftung, FactSheet, CO2-Bepreisung, Juni 2021, available at https://www.bertelsmann-stiftung.de/fileadmin/files/user_upload/MT_Factsheet_CO2_Bepreisung_2021_DT.pdf [09.02.2022].
- Brown*, *American Heat: Ethical Problems with the United States' Response to Global Warming*, Rowman & Littlefield, 2002.

72 *Bullock*, *Washington International Law Journal* 2018, p. 609, 640.

73 *Bullock*, *Washington International Law Journal* 2018, p. 609, 639.

- Bullock*, Combating Climate Reclacitrance: Carbon-Related Border Tax Adjustments in a New Era of Global Climate Governanec, Washington International Law Journal 2018, pp. 609.
- Eicke/Weko/Apergi/Marian*, Pulling up the carbon ladder? Decarbonization, dependence, and third-country risks from the European carbon border adjustment mechanism, Energy Research & Social Science, 2021, Vol. 80.
- Directive 2003/87/EC, establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC, [2003], OJ L 275/32
- European Institute for Asian Studies (EIAS), Mitigating Opposition to the Carbon Border Adjustment Mechanism: Engaging BRICS and the Global South, 21. September 2021, available at <https://eias.org/op-ed/mitigating-opposition-to-the-carbon-border-adjustment-mechanism-engaging-brics-and-the-global-south/> [14. February 2022].
- European Parliament, Briefing, Trade Related Aspects of a Carbon Border Adjustment Mechanism. A Legal Assessment, available at [https://www.europarl.europa.eu/RegData/etudes/BRIE/2020/603502/EXPO_BRI\(2020\)603502_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2020/603502/EXPO_BRI(2020)603502_EN.pdf) [09.02.2022].
- Hillmann*, Changing Climate for Carbon Taxes: Who's Afraid of the WTO? American Action Forum and German Marshall Fund, 2013.
- Imeri/Barzilska*, Challenges for the planned carbon border tax measures in the EU, 09 Nov 2021, available at <https://ihsmarkit.com/research-analysis/challenges-for-the-planned-carbon-border-tax-measures-in-the-eu.html> [14 Feb 2022].
- Ismer/Neuhoff/Pirlot*, Border carbon adjustments and alternative measures for the EU ETS: An evaluation, DIW Discussion Papers, No. 1855, Deutsches Institut für Wirtschaftsforschung, 2020.
- Merkel*, Rechtliche Fragen einer Carbon Border Tax – Überlegungen zur Umsetzbarkeit im Lichte des Welthandelsrechts, ZUR 2020, pp. 658.
- Monjon/Quirion*, Addressing leakage in the EU ETS: Border adjustment or output-based allocation? Ecological Economics 2011, pp. 1957.
- Regulation (EU) 2021/1119, establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999, [2021] OJ L 243/1.
- Republic of Poland, Ministry of Climate and Environment, Minister Moskwa in Katowice: work on the CBAM mechanism as an opportunity to discuss the whole ETS system, 29 November 2021, available at <https://www.gov.pl/web/climate/minister-moskwa-in-katowice-work-on-the-cbam-mechanism-as-an-opportunity-to-discuss-the-whole-ets-system> [14 Feb 2022].
- South African Government, Joint Statement issued at the conclusion of the 30th BASIC Ministerial Meeting on Climate Change hosted by India on 8th April 2021, available at <https://www.gov.za/nr/speeches/joint-statement-issued-conclusion-30th-basic-ministerial-meeting-climate-change-hosted> [09.02.2022].
- Umweltbundesamt, Der europäische Emissionshandel, 12. July 2021, available at <https://www.umweltbundesamt.de/daten/klima/der-europaeische-emissionshandel#teilnehmer-prinzip-und-umsetzung-des-europaischen-emissionshandels> [14 February 2022].
- United Nations, Declaration on the Right to Development at 25, available at <https://www.un.org/en/events/righttodevelopment/background.shtml> [14 Feb 2022].

