ISSUE BRIEF
Carbon Taxes and Trade Agreement Compliance

I. EXECUTIVE SUMMARY

Various carbon tax regimes have been proposed or constructed with a view to reducing carbon consumption and its impact on the environment. Recognizing that the unilateral imposition of a carbon tax may have competitiveness implications for producers in the home country in a world of global trade and supply chains, certain policy approaches regarding the tax treatment of imports and exports can help avoid the migration of carbon emissions. However, when a carbon tax system includes provisions regarding imports and exports, there are implications that arise from U.S. international trade agreements at the World Trade Organization and free trade agreements (FTAs). This paper examines the issues policy-makers must keep in mind when designing a revenue-neutral carbon tax system structured as a consumption tax that includes provisions regarding the application of the tax to imports and exports.[1]

Consumption taxes are common features of global tax systems and are widely understood to be consistent with existing trade law, even when applied to imports and/or refunded on exports. Value-added tax (VAT) systems are among the most widely used but other forms exist, such as U.S. excise taxes on alcohol, tobacco, and gasoline. There are certain structural differences between the application of a VAT or excise tax and a carbon tax that will require careful consideration, but it should be possible to adopt a properly-designed carbon tax to be consistent with United States' trade obligations at either the WTO or in its FTAs.

In particular, creating a carbon tax regime that is consistent with WTO and FTA obligations requires paying careful attention to a number of rules regarding non-discrimination. Above all, the key is to ensure the tax applies equally to foreign and domestic products, and also among trading partners. Further, if it is found to somehow discriminate, it should not do so arbitrarily, or look like an excuse for protectionism instead of an environmental initiative. Because a carbon tax has not been directly subject to a WTO challenge, there is a degree of uncertainty inherent in trying to predict the WTO-consistency of any particular formula. This paper outlines the WTO/FTA issues policy makers should consider in developing or assessing a carbon tax regime and the specific aspects of the system that require careful consideration to avoid creating conflicts with trade obligations. Ultimately, for a tax that would focus on the most energy intensive goods, the challenge of applying it to traded goods in a WTO-consistent manner is likely to be directly related to the coverage of the program.

II. INTRODUCTION

A. Carbon Tax Basics

A tax on carbon-based fuels (coal, oil, gas, etc.) has been proposed in many countries and implemented in a few. The principle behind a carbon tax is to raise the cost of carbon dioxide (CO2) emissions. If set at an appropriate level, a carbon tax becomes a powerful financial incentive to develop and use other lower CO2 emitting fuels and energy sources.

[1] All references to a "carbon tax" in this paper assume that the tax is imposed at the border on imports and refunded when goods are exported, since a carbon tax that is applied only to domestic production does not impact U.S. international trade commitments. In addition, such a carbon tax is assumed to be revenue neutral.

The carbon content of every fossil fuel can be precisely known. The amount of CO_2 released during the burning of fossil fuels is directly proportional to the fuel's carbon content.[2] Thus, fuels with higher carbon content will emit more carbon dioxide (CO_2) when burned than fuels with lower content.

Taxing fuels (or items downstream in the production process) based on their carbon content would result in a carbon tax burden that is proportional to the level of CO_2 emissions. Moreover, such a tax is easier to administer the closer it is applied to the original source of the carbon emission.

Like any new tax, a carbon tax would impose new costs on the economy of the imposing country. Given the highly integrated nature of national economies through trade and supply chains, these costs would likely impact the international competitiveness of industries in the country that has imposed the tax. For example, imports from foreign markets that do not have a carbon tax (or are taxed at a lower rate) would, all else equal, be less expensive to consumers than the comparable or like product produced in the country with the carbon tax. This could incentivize producers of energy-intensive products to shift production to countries that do not impose a carbon tax. This shifting of production from a country with a carbon tax to a country without a carbon tax is often classified as an example of "carbon leakage."[3]

The impact on competitiveness can be felt through effects on both imports and exports. In order to respond to these concerns, policy makers may consider tools to adapt the carbon tax for imports and exports.[4]

B. <u>Carbon Tax and International Trade</u>

A carbon tax imposed only on the domestic production of carbon-based fuels does not, by itself, impact international trade obligations. However, the problems created by carbon leakage and the effect on competitiveness often prompts policy-makers to seek means to address these trade effects by adding measures regarding the treatment of imports and exports to level the playing field.

For example, a carbon tax regime could impose a tax on imports – e.g., based on their carbon content -- to try to eliminate the incentive to move energy-intensive production abroad and to prevent carbon leakage. To address the competitiveness of exports, a carbon tax regime may provide for refunds of carbon taxes paid when U.S. produced goods are exported. Any provision that affects the treatment of imports or exports risks being challenged as inconsistent with either U.S. commitments made at the World Trade Organization (WTO) or its bilateral/regional Free Trade Agreement (FTA) obligations. Thus, in designing a carbon tax, policy makers may wish to develop carbon tax mechanisms in a manner that is consistent with U.S. international trade obligations.

III. <u>FUNDAMENTAL PRINCIPLES OF WTO OBLIGATIONS</u>

The WTO is the primary international organization engaged in enforcing the rules of trade between nations that WTO members have previously negotiated and agreed to under its auspices. The WTO,

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[2] Carbon Tax Center, "What is a Carbon Tax," www. https://www.carbontax.org/whats-a-carbon-tax/.

[3] Peter Wooders and Aaron Cosbey, *Climate-linked tariffs and subsidies: Economic aspects (competitiveness & leakage)* (Geneva Graduate Institute, Centre for Trade and Economic Integration, Thinking Ahead on International Trade (TAIT)), 2nd Conf. Climate Change, Trade and competitiveness: Issues for the WTO (June 2010).

[4] For purposes of this paper, the impact of a carbon tax on the service sector is not addressed, but depending on the service, and whether it is traded, the competitiveness impact will vary.

and its origins in the original General Agreement on Tariffs and Trade (GATT), is based on the premise that opening markets to international trade, with a few justifiable exceptions, is the best way to encourage economic growth and development. At the heart of the WTO are a series of agreements, each negotiated and signed by the WTO's members and ratified by their governments. A number of basic principles are reflected throughout all of these agreements, which are the foundation of the multilateral trading system.

The WTO obligations most relevant to a carbon tax regime are:

- **Lowering Trade Barriers:** WTO obligations are designed to move member countries toward more open markets and to try to stop countries from creating new trade barriers, such as customs duties (or tariffs), import bans, or quotas that restrict trade. Each WTO member has committed to a minimum level of access to fairly traded products (i.e., non-subsidized, non-dumped) that it will provide in its market, and, in most cases, members cannot back-track from these commitments.

- **Non-Discrimination:** Non-discrimination commitments in the WTO generally take two forms. First, WTO members should not discriminate among WTO members (known as "most favored nation" (MFN) treatment). This means members generally cannot provide special treatment for some members but not others or adopt rules to arbitrarily single-out or penalize only certain countries.[5] Second, members must follow the principle of "national treatment." Where domestic and imported goods compete against one another in the marketplace, members cannot discriminate against the imported product or provide preferences to their domestic products.[6] Where a tax or fee is imposed, national treatment requires that the amount charged on the imported product cannot exceed that charged on a like domestic good.[7]

- **Trading Fairly:** The WTO agreements discourage 'unfair' trade practices, such as providing subsidies to exports or selling products at prices below cost to gain market share. In particular, WTO rules prohibit members from providing subsidies that are contingent on exporting or that give preferences for using domestic instead of imported goods.

- **Protection of National Interests:** The WTO's agreements preserve members' rights to take actions – even if they are inconsistent with one or more WTO obligations – if those actions are part of an effort to pursue certain national interests, including the protection of human, animal, and plant health, or conservation of scarce resources. However, WTO members must not use environmental protection measures as a means of disguising protectionist policies.

Each of these principles is discussed in more detail in the following section, with particular emphasis on their relevance to a carbon tax system.

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[5] See General Agreement on Tariffs and Trade 1994 ("GATT 1994"), 1867 U.N.T.S. 187, Article I.

[6] See GATT 1994, Article III.

[7] See GATT 1994, Article II.2 and III.2.

IV. KEY WTO ISSUES FOR A CARBON TAX

A. Can a Carbon Tax be WTO Consistent?

Whether a particular tax can be applied at the border to imports and/or be refunded on exports and be WTO-consistent first depends on whether the tax is a "direct" or "indirect" tax. The WTO Agreements state that taxes on products (indirect taxes) can be imposed on imports so long as the tax also applies to similar goods that are produced domestically, and any exemption for exports is not in excess of the amount owed on "like" products when sold for domestic consumption. On the other hand, direct taxes (e.g., a traditional income tax) cannot be applied to imports or refunded on exports.[8]

Under WTO rules regarding subsidies, direct taxes are defined as "taxes on wages, profits, interests, rents, royalties, and all other forms of income and taxes on the ownership of real property," while indirect taxes are defined as "sales, excise, turnover, value added, franchise, stamp, transfer, inventory and equipment taxes, border taxes, *and all taxes other than direct taxes and import charges*."[9] In more simple terms, direct taxes apply to producers' income, while indirect taxes are applied to products themselves.

B. Non-Discrimination

1. Most-Favored Nation Treatment

The principle of MFN treatment requires WTO members to grant any "advantage, favour, privilege or immunity" that is given to a product from one WTO member to the same product from all other WTO members.[10] In other words, the MFN principle requires WTO members to treat the same imported product from all countries equally. As a practical matter, the approach to carbon pricing varies widely among WTO Members and is a relevant factor to consider in designing a carbon tax. In designing mechanisms to account for variations in carbon pricing among countries, policy-makers should avoid approaches that draw distinctions based on the country of origin as opposed to the emissions associated with a product.

2. National Treatment

The obligation of national treatment is that an imported foreign good must be given treatment no less favorable than that given to its like domestic counterpart.[11] Thus, imported and domestically produced goods must be subject to functionally equivalent laws, rules, regulations, standards and practices.[12]

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[8] See, *e.g.*, Appellate Body Report, *United States – Tax Treatment for "Foreign Sales Corporations"*, WT/DS108/AB/R, adopted 20 March 2000, DSR 2000:III, p. 1619, paras. 97-98. *("US – FSC").*

[9] Agreement on Subsidies and Countervailing Measures ("SCM Agreement"), 1869 U.N.T.S. 14, Annex 1 (e) at n. 58 (emphasis added). The italicized phrase indicates that any tax that is not clearly one of the examples of direct taxes is an indirect tax.

[10] GATT 1994, Article I.1.

[11] See GATT 1994, Articles II.2 and III.2.

[12] See GATT 1994, Article III.4, "The products of the territory of any contracting party imported into the territory of any other contracting party shall be accorded treatment no less favourable than that accorded to like products of national origin in respect of all laws, regulations and requirements affecting their internal sale, offering for sale, purchase, transportation, distribution or use."

With respect to taxes or charges on imports, national treatment requires that a tax cannot be assessed in excess of that applied to like domestic products.[13] Where products are similar enough to be considered "like" (described in more detail below), the tax treatment of imported goods must be no greater than that of the domestic counterpart good.[14]

3. Likeness

The obligation to provide MFN and national treatment only applies in circumstances where the imported and domestic goods are considered to be "like" products. WTO panels and the Appellate Body have held consistently that "likeness" is "fundamentally, a determination about the nature and extent of a competitive relationship between products."[15] Traditionally, the Appellate Body has established a four-part test for likeness based on: 1) the physical properties of the imported and domestic goods; 2) the end uses of the products; 3) consumer tastes and preferences with respect to the products; and 4) the international tariff classification of the goods.[16] Where imported and domestic goods are in a competitive relationship with one another, they are generally understood to be "like" for purposes of a country's MFN and national treatment obligations.[17]

The WTO's traditional interpretation of likeness and the obligation to treat like products equally could complicate several aspects of a carbon tax. First, there are issues that arise if the tax is applied on imported and domestic goods at different points in a supply chain. If the domestic carbon tax is imposed on carbon-heavy fuels at the point of extraction (e.g., at the well-head or mine) the like product for purposes of imposing the carbon tax would be imported oil, coal, or natural gas. Complications arise when the products that are imported are energy-intensive goods and not the fuels themselves, or are otherwise at a different point in the supply chain than where the tax is imposed on domestic production. A carbon tax imposed at the point of extraction (e.g., a well-head) may face challenges if the import tax or export refund is applied to downstream products (e.g. on steel or autos or a bushel of corn) because the U.S. good being taxed is not "like" the imported good being taxed.

Thus, the WTO likeness criteria has traditionally been interpreted to mean that an imported aluminum ingot produced using coal is "like" a domestic aluminum ingot produced using natural gas. This further means the national treatment obligation would require the import be taxed at a rate *no less favorable* than the like domestic product.

That said, there is an emerging body of scholarly support for the argument that equal treatment could include imposing different tax rates based on the carbon-intensity of how goods are produced, i.e. goods produced using low or no-carbon energy sources could be taxed less than the same goods produced using a carbon intensive energy source. Such a tax formula could be applied to domestic and imported goods alike, without regard to country of origin – that is, aluminum ingots from one country could be assessed different carbon taxes depending on how they were manufactured.

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[13] GATT 1994, Article III. 1 and III.2.

[14] GATT 1994, Article III.2. Appellate Body Report, *Japan – Taxes on Alcoholic Beverages*, WT/DS8/AB/R, WT/DS10/AB/R, WT/DS11/AB/R, adopted 1 November 1996, DSR 1996:I, pp. 18-19 ("*Japan – Alcoholic Beverages II*") and Appellate Body Report, *Canada – Certain Measures Concerning Periodicals*, WT/DS31/AB/R, adopted 30 July 1997, DSR 1997:I, pp. 22-23.

[15] Appellate Body Report, *European Communities – Measures Affecting Asbestos and Asbestos-Containing Products*, WT/DS135/AB/R, adopted 5 April 2001, DSR 2001:VII, p. 3243, paras. 98-99. ("*EC – Asbestos*").

[16] *Japan – Alcoholic Beverages II*, pp. 20-22.

[17] In addition, goods can be presumed to be like one another when the measure at issue provides different treatment to goods based only on their national origin.

C. Subsidies

As discussed above, WTO rules state that taxes on products (indirect taxes) may be applied to imports and rebated on exports, but taxes on producers' income (direct taxes) cannot be. To be WTO consistent, policy-makers would need to focus on applying the carbon tax to specific products (e.g., carbon-heavy fuels and energy intensive products) instead of on income.

A number of policy advocates also have suggested that, to preserve the competitiveness of U.S. exports in markets where there is no similar cost imposed on carbon, the carbon tax paid on domestically produced fuels should be refunded if those goods are ultimately exported. Assuming the carbon tax is assessed on products, refunding the carbon tax on exports would not violate WTO rules regarding prohibited export subsidies. However, any rebate must not be in excess of the tax paid; careful consideration must be given to the rebate's design to avoid this.

WTO subsidy commitments also could be implicated depending on how the government decides to allocate the revenue collected from the carbon tax. If the proceeds from the tax were allocated to U.S. producers to offset the cost of the tax or investments in technology or energy efficiency, the carbon tax could be considered an unfair domestic or prohibited export subsidy subject to disciplines under the WTO rules.[18] Uses of the tax revenue that do not make a financial contribution to U.S. producers, or are not specific to an enterprise or industry would not be a subsidy. Revenue neutrality that also meets this test would not be a subsidy.

D. Administrative Issues and WTO Compliance

Policy makers will obviously want a carbon tax regime to be readily administrable. As noted, several trade obligations could require the imposing country to tailor the rate of carbon tax imposed on any individual import from any country to a very specific degree. For example, strict equal treatment of all imports could mean the administering country must ensure a comparable level of taxation based on the carbon intensity of the production process of a specific imported product from a specific country. This level of detail and specificity would likely be impossible to administer. Creating a carbon tax regime that can be reasonably administered may mean that policy makers would have to simplify administration of the tax. For example, policy-makers could establish certain benchmarks for approximating the carbon content of particular goods instead of attempting to calculate their actual carbon content.[19] As one moves along the spectrum of choices, with specificity at one end and administrability at the other, the risk rises that the tax could be vulnerable to a successful challenge in the WTO. It will be incumbent on policymakers to strike the right balance in designing the carbon tax system so that administrability is not emphasized at the expense of WTO-consistency.

E. GATT Article XX: WTO Exceptions That Permit Discrimination Under Certain Circumstances

The WTO has a mechanism to help accommodate an inconsistency with most obligations that occurs in the context of pursuing certain policy objectives that are recognized as legitimate national interests. GATT Article XX includes exceptions that excuse members for violations of WTO

[18] See SCM Agreement, Article 1.1, "…a subsidy shall be deemed to exist if…there is a financial contribution by a government...and a benefit is thereby conferred."

[19] One way to do this that would minimize the risk of violating the WTO obligation to not tax imported products more than like domestic goods would be to assess the carbon tax on imports "as if the good had been produced in the United States according to the predominant method of production." GATT Panel Report, *United States – Taxes on Petroleum and Certain Imported Substances*, L/6175, adopted 17 June 1987, BISD 34S/136 para. 5.2.8.

commitments that occur as a result of policies that are adopted to achieve certain specified policy objectives, including the protection of human, animal, or plant life or health or the conservation of an exhaustible natural resource.[20] A carbon tax system could fall within the scope of either or both of these categories covered by the exception. However, to qualify for this exception, policies must also satisfy two additional conditions: 1) the policy must be operated in a manner that does not "constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail"; and 2) it cannot create "a disguised restriction on trade." The inclusion of this exception means that, when a country is pursuing policies to protect the environment, some degree of discrimination may be tolerated by the WTO so long as it is not "arbitrary or unjustified" and does not impose unnecessary restrictions on trade.

As discussed above, even where policy-makers make their best effort to design a carbon tax that complies with the relevant WTO commitments, there may be an unavoidable risk of inconsistency with the MFN or national treatment obligations. For example, some degree of discrimination between like domestic and imported goods may arise based on decisions made with respect to differences in the point at which the tax is collected and how it is calculated for imports as compared to domestic goods. This is precisely the type of situation the GATT Article XX exception is designed to address. Thus even if there is discrimination against or between imports as a result of a carbon tax, WTO rules permit this so long as the carbon tax is structured in such a way that: 1) focuses on achieving environmental goals; 2) any discrimination that arises is a result of pursuing environmental protection (i.e., it is not arbitrary or unjustified); and 3) it is not merely a disguised trade restriction.

F. Implications of a Trade Agreement Violation

Nothing in the WTO rules can affirmatively prevent the United States or any other WTO member from adopting a carbon tax that violates its WTO commitments. Under WTO dispute settlement rules, a country that is found to have violated its WTO obligations is, in theory, supposed to bring its inconsistent policy into compliance within a set agreed upon reasonable period of time (RPT) (e.g., one year). Thus, if any WTO inconsistency is only at the margins of the overall carbon tax scheme, there is time to make changes without facing retaliation.

WTO members, as sovereign states, cannot be compelled to withdraw or modify an inconsistent policy, but persistent non-compliance comes at a price. If the U.S. were to lose a dispute at the WTO and refuse to modify the inconsistent provisions of its carbon tax, WTO rules would allow the WTO members who sued the United States to impose retaliation against the United States, for example by increasing their import tariffs on U.S. exports, in an amount equal to the economic harm imposed by the inconsistent portions of the tax. Retaliation would stay in place until the United States made the necessary changes to the carbon tax to comply with its WTO obligations, or an agreement was reached that removes the retaliation.

V. TREATMENT OF A CARBON TAX UNDER FTA OBLIGATIONS

U.S. FTAs borrow many of the principles described above and incorporate them into regional and bilateral agreements. The principle of national treatment is widely adopted throughout U.S. FTAs. WTO rules allow an exception to the concept of MFN treatment for FTAs that allows special benefits for trade among the signatories to the agreement that do not have to be granted to all other WTO members.

[20] See GATT 1994, Article XX (b) and (g).

However, taxation measures as a general rule are carved out of U.S. FTAs.[21] Certain FTA provisions, such as those providing national treatment for goods, are not subject to the carve-out for tax measures, but are instead applied in a manner consistent with the WTO agreement.[22] In sum, any carbon tax that complies with the United States' obligations under the WTO agreements (including the Article XX exception) would also be highly likely to be consistent with U.S. FTA obligations.

VI. <u>CONCLUSION</u>

It should be possible to design a carbon tax regime that is consistent with U.S. WTO obligations. However, to achieve these goals, compromises are likely to be needed to ensure the tax regime can reasonably be administered. In the event certain elements of a carbon tax regime were found to violate key obligations of the WTO, the exception in Article XX for violations that occur in the pursuit of environmental protection could allow the U.S. to justify such violations if all of the conditions in GATT Article XX are met.

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[21] See, *e.g.*, U.S.-Mex.-Can. Trade Agreement ("USMCA"), Article 32.3 (Nov. 30, 2018), Korea – U.S. Free Trade Agreement, Article 23.3, 46 I.L.M 642 (2007), and North American Free Trade Agreement, Can.-Mex.-U.S., Article 2301, 32 I.L.M. 289 (1993).

[22] The FTA exceptions for taxation measures cross-reference the obligations of GATT 1994, Article III.