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WHEN CO₂ GOES TO GENEVA
TAXING CARBON ACROSS BORDERS —
WITHOUT VIOLATING WTO OBLIGATIONS

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ABOUT THE ILRP

The International Law Research Program (ILRP) at CIGI is an integrated multidisciplinary research program that provides leading academics, government and private sector legal experts, as well as students from Canada and abroad, with the opportunity to contribute to advancements in international law.

The ILRP strives to be the world's leading international law research program, with recognized impact on how international law is brought to bear on significant global issues. The program's mission is to connect knowledge, policy and practice to build the international law framework — the globalized rule of law — to support international governance of the future. Its founding belief is that better international governance, including a strengthened international law framework, can improve the lives of people everywhere, increase prosperity, ensure global sustainability, address inequality, safeguard human rights and promote a more secure world.

The ILRP focuses on the areas of international law that are most important to global innovation, prosperity and sustainability: international economic law, international intellectual property law and international environmental law.

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EXECUTIVE SUMMARY

Over the last few decades, many policy and regulatory initiatives have emerged around the world in order to address climate change. The European Union, some Canadian provinces and more than 30 American states have adopted laws related to climate change mitigation. Some of these have focused on reducing carbon dioxide (CO₂) and greenhouse gas (GHG) emissions in an attempt to limit the expansion of the greenhouse effect and reduce the speed of global warming.

This paper will discuss how trade and the environment can intersect in the case of carbon taxes. Carbon taxes become relevant for international trade when they are coupled with border tax adjustment (BTA) legislation for imported products. BTAs are optional taxes or duties imposed on imports in order to ensure similar market conditions for similar domestic and imported products, when the domestic products are already taxed nationally. BTAs, in the case of products with a high carbon footprint, are equivalent to taxation imposed on similar domestic products with the same amounts of CO₂ emitted during their production. BTAs are intended to level the playing field between domestic and foreign products. Such tax schemes, if not designed properly, can be found to violate a country's international commitments before the World Trade Organization (WTO). More specifically, the paper will discuss the intended purpose and benefits from BTAs, their WTO relevance and compatibility, and the implications for states and provinces that regulate CO₂ emissions and apply BTAs.

Offsetting national carbon taxes with legislation applicable to imported products requires careful design. WTO members are not allowed to discriminate among different foreign products, or between foreign and domestic products. There currently exists no consensus among countries on the legality of carbon taxes and BTAs in the WTO. This lack of consensus on carbon regulation is part of a general misalignment between many WTO members with respect to processes and production methods. This paper argues that environmentally conscious governments can impose a WTO-compatible BTA to offset domestic CO₂ legislation, following a set of requirements laid out in the main WTO agreement, the General Agreement on Tariffs and Trade (GATT).

Finally, in order to benefit from the WTO-compatible offsetting BTA, federal governments need to engage in coordinated efforts to harmonize treatment of high CO₂ emitters domestically. Using environmental legislation that couples a carbon tax with a BTA will make domestic taxation more politically acceptable and economically plausible. Domestic industries will not bear the burden of environmental regulation alone. Federal states such as Canada should impose nationwide carbon taxes and BTAs, and thus help and reward environmental outliers such as British Columbia.

INTRODUCTION

Environmental degradation awareness has prompted governments and private actors to focus more and more on policy addressing climate change. In recent decades, the European Union, some Canadian provinces and many American states have adopted climate-related laws to address carbon emissions.¹

To a large extent, such efforts remain uncoordinated at the international level (Böhringer and Heinz 2006; Chen 1997). Attempts to establish a common front against environmental degradation at a global level have been limited to the adoption of protocols, principles and guidelines such as the Rio Declaration, the Montreal Protocol and the Kyoto Protocol, whose implementation and enforcement remain unsatisfactory (Beyerlin and Stoutenburg 2013). Attempts to consolidate an environmental regime in the form of a binding treaty with specific commitments against climate change during the 2009 Copenhagen summit did not result in such an agreement; instead, that failure generated widespread anxiety about the very possibility of concerted climate change action.

Some of the legislative initiatives regulating environmental issues have focused on CO₂ and other GHG emissions in an attempt to limit the destruction of the ozone layer and the expansion of the greenhouse effect, and reduce the speed of global warming. In economic terms, CO₂ emissions are a negative externality of production chains that somehow need to be accounted for. The legislation imposing taxes and other remedies is, in that sense, a corrective mechanism. Two stand-out examples of such laws are the 2006 California Global Warming Solutions Act and the 2008 British Columbia Carbon Tax Act.

Environmental legislation that limits or puts a price on emissions has received both positive and negative attention. Economists and environmentalists have examined the advantages and shortcomings of carbon tax laws at length. Among the cited disadvantages of carbon taxation are “leakage” (the movement of domestic industries to countries with less rigorous carbon legislation, or possibly none at all, where the same product can therefore be produced at a lower cost), and the decrease in competitiveness of domestic industries in global markets. These two phenomena are certainly linked, due to the price increase that a carbon tax will result in for high-carbon-footprint products. Coupled to leakage is the decrease in competitiveness due to lower prices of commodities produced without compensating for their CO₂ emissions either abroad or across state/provincial lines. Trade within

1 For a list of such laws, see the Climate Change Laws of the World database (<http://web.law.columbia.edu/climate-change/resources/climate-change-laws-world>), as well as the Western Climate Initiative, Inc. (www.wci-inc.org/).

free trade areas, or among the 161 member states of the WTO, will make it increasingly difficult for domestic carbon-taxed products to compete against the influx of cheaper, non-carbon-taxed products coming from abroad. One possible remedy would be to impose a tax that is similar to that imposed on imported products. This solution, however, may not be easy to implement: carbon-related tax schemes have been cited as potentially violating countries' international obligations before the WTO, as they tax a substance related to production and not incorporated into the final good.

This paper will discuss how international trade and the environment can intersect in the case of carbon taxes. Carbon taxes become relevant for trade when they are coupled with BTA legislation for imported products and rebates for export-destined domestic products. BTAs are taxes or duties imposed on imports that are not similarly taxed in their country of origin. For products with a high carbon footprint, BTAs are equivalent to taxation imposed on similar domestic products with the same amounts of CO₂ emitted during their production. BTAs and rebates are intended to level the playing field between domestic and foreign products. More specifically, BTAs are meant to allow domestic industries to remain competitive vis-à-vis their foreign counterparts when they are obliged to raise the price of their products due to local environmental legislation. Such initiatives, if not designed properly, can be found to violate a country's international commitments before the WTO. On the other hand, if they are WTO-compatible, BTAs can help prevent leakage and help in the progressive reduction of CO₂ emissions.

COUPLING CARBON TAXES WITH BTAs

The two best-known systems for the reduction of CO₂ emissions are carbon taxes and cap-and-trade arrangements. Cap-and-trade schemes are usually implemented through the provision of emissions permits that industries can either use themselves or sell to higher CO₂ emitters. Carbon taxes are more straightforward and apply to commodities whose production is connected with high CO₂ emissions. When a government decides to prioritize and address environmental concerns through legislation, inevitably domestic industries are placed in a worse position than their foreign competitors who operate in markets where such laws are non-existent. The price of carbon is incorporated into the price of domestic goods subject to environmental legislation, while their foreign counterparts become more competitive and can offer the same product at a lower price. Imported products are not only cheaper in the domestic market, but those products also remain more competitive in other countries' markets. Domestic goods that have paid for their carbon footprint become less competitive both domestically and once they are exported abroad. If such market conditions continue over the long term, domestic industries are motivated to

move their operations to less environmentally friendly jurisdictions, where carbon taxes are much lower or altogether absent.

To counter the negative effects of carbon taxes on domestic producers, governments can impose similar requirements on imports in the form of border adjustments. Rebates can be provided for products exported to other countries that impose similar BTAs (in order to avoid double taxation). Finally, some form of compensatory rebates can be designed for exported products, in order to maintain their competitiveness both at the internal and global marketplace. Another positive effect of BTAs is the prevention of leakage. Since CO₂-polluted air affects the entire planet, BTAs discourage free-riders from maintaining lax CO₂ emission policies; the cost and responsibility of a global problem are thus shared among all the most polluting nations (Hillman 2013; Horn and Mavroidis 2011; Pauwelyn 2013).

Governments are free to tax their industries as they wish and impose any domestic environmental taxes. If Canada, the United States and the European Union (or Canadian provinces, US states and EU countries) impose only a carbon emissions tax on their domestic industries, such legislation would not cause any concerns at the international level. However, international obligations most countries have assumed in the context of the WTO have limited this freedom regarding treatment of foreign products (Veel 2009). The 161 member countries of the WTO have concluded several agreements outlining commitments to reduce or eliminate tariffs and taxes in trade on products, since such taxes are generally seen as artificially price-distorting mechanisms. At first glance, BTAs complicate the regulatory scene for CO₂ emissions, since they extend domestic policy measures to products of foreign origin. However, a strong legitimizing argument can be made against market-distorting properties of CO₂ taxes, if one considers that they are imposed to correct a negative market externality — that is, air pollution.

Offsetting national carbon taxes with legislation applicable to products of foreign origin requires careful design. WTO members are not allowed to discriminate among different foreign products, or between foreign and domestic products. There exists no consensus among countries on the legality of carbon taxes and BTAs in the WTO.² In order to determine whether environmental BTAs are WTO-compatible, they can be tested using an economic test. Simply put, taxes cannot be greater for products of foreign origin than they are for domestic products, namely BTAs cannot be greater than the carbon taxes they are meant to offset. However, there can be instances when domestic tax schemes are unavoidably different from BTAs, and as a result they end up discriminating between foreign and

2 See, for example, "Environment: Issues Labelling" (www.wto.org/english/tratop_e/envir_e/labelling_e.htm).

domestic products with a similarly high carbon footprint. Moreover, offsetting measures in the form of rebates for exported products might be considered dumping in the WTO. In this case, the WTO rules offer one more opportunity for the country imposing carbon taxes and BTAs to justify such legislation using an environmental test (Hillman 2013; Pauwelyn 2013). These two tests will be discussed in the following two sections.

APPLES AND APPLES: HOW THE WTO CORNERSTONE RULES APPLY TO BTAs

The WTO, which in its first form was called the General Agreement on Tariffs and Trade, has been the main organization regulating tariffs in trade between its members since 1947. In 1995, the GATT metamorphosed into the WTO and expanded its regulatory reach to areas such as intellectual property, trade in services and others. The original GATT, however, together with all the revisions countries adopted over the years, remains in force. The main mandate of the WTO is the progressive elimination of tariffs in cross-border trade. The WTO membership base represents 99 percent of the world's population and 99 percent of world trade volume (161 members in total and many others in accession negotiations). Under the GATT and the WTO, trade concessions that each country commits to during negotiations are automatically extended to all members through non-discrimination, the cardinal principle in international trade law.

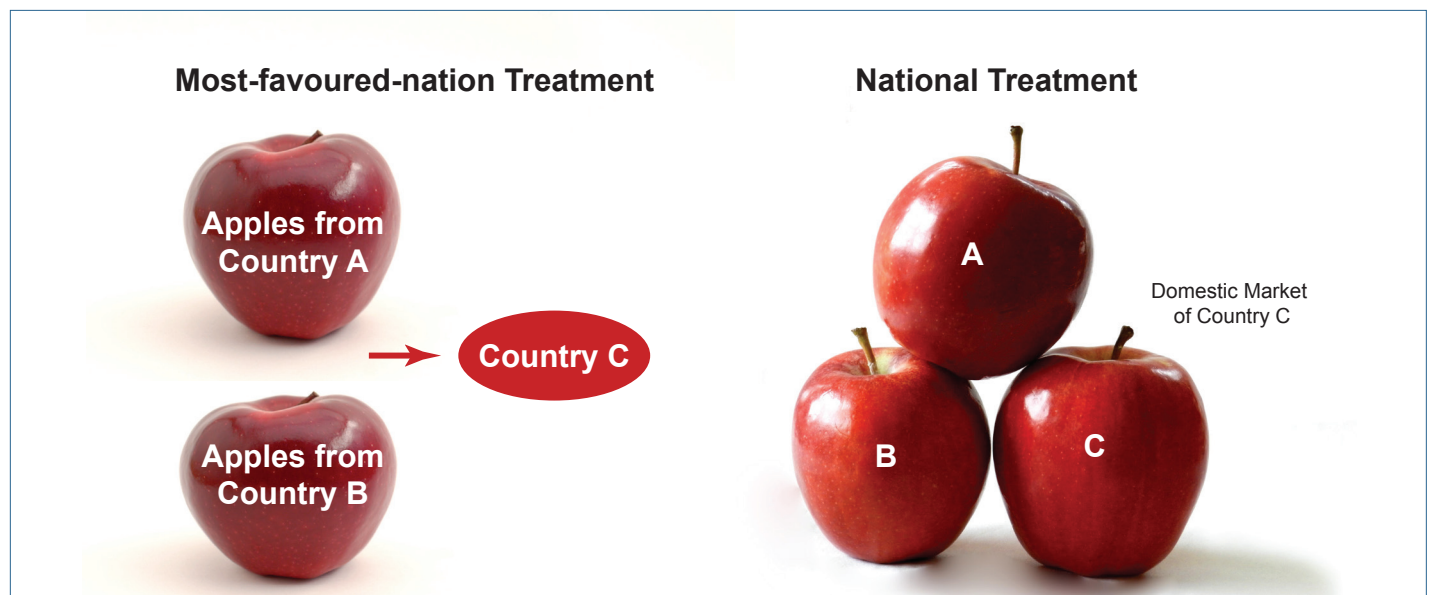
Non-discrimination has an international side, called the most-favoured-nation principle, and a domestic side, called national treatment. Once Country C agrees with one of its major trading partners, Country A, to lower a tariff on a certain product (for example, to reduce tariffs on apples by two percent), Country C has to lower tariffs

by two percent for the same kind of apples imported from every other WTO member state. If the same two foreign products with identical carbon footprints were taxed differently at the border, this could constitute a violation of the most-favoured-nation treatment. This obligation is outlined in article I, paragraph 1, of the GATT. The best way to avoid a violation of GATT article I is to ensure that the same amount of BTA is applied to identical products and the measure is origin-neutral. Any references to major CO₂ emitters or other nation-specific properties must be avoided altogether in the design of a BTA. This may become challenging for a number of reasons. For example, there may be products with high CO₂ emissions that have already been taxed elsewhere. A WTO-compatible BTA cannot explicitly exempt an already-taxed product by referencing its country of origin. However, it would be unfair and overly burdensome for some products to be taxed twice for the same CO₂ emission. To overcome double taxation for certain exported products, the exporting country can either not tax them at all, or tax them but provide a rebate to offset the foreign tax (Pauwelyn 2013, 42).

The second aspect of non-discrimination is national treatment, and it applies after foreign products have been imported into Country C. Beyond treating all WTO member states without discrimination with respect to tariffs, member states cannot favour domestic products over imported ones. According to most-favoured-nation treatment, upon entry into Country C the apples from WTO members A and B have to be treated equally. According to national treatment, after entry, apples from countries A, B and C must also be treated equally in C's internal market (see Figure 1).

Complaints about the treatment of foreign products can be raised at the WTO only by countries. Companies and

Figure 1: Non-Discrimination in Trade



Source: Author.

consumers have no legal standing before the organization. Formal complaints in the WTO are litigated in a two-tier process before the panels; if the first decision is appealed, then it goes before the Appellate Body. WTO judges, panellists and Appellate Body members examine claims and arguments of countries on either side of a dispute and determine whether discriminatory treatment of products has occurred. To date, carbon taxes have not been examined before the panels and Appellate Body. The WTO judges, however, are not strangers to disputes with strong environmental and health-related aspects. Products containing asbestos, cigarettes, gasoline and endangered species such as dolphins and sea turtles, have all had their day in court in Geneva.

A prerequisite for determining whether one country discriminates is the so-called “likeness” of products. The question of likeness is crucial for the examination of both national treatment and most-favoured-nation treatment. The question of which two products are similar or the same has preoccupied the WTO panels and Appellate Body several times. Are Japanese shochu and vodka “like” products? How about tuna fished with “dolphin-safe” nets versus that fished without such environmentally friendly nets? Or products containing asbestos and their substitutes? Such determinations are part and parcel of the work of WTO judges.

It has been accepted, after many years of legal disputes between numerous WTO members, that the determination of likeness is based on the following criteria: physical properties and characteristics of products; substitutability; end-use; tariff classification; and consumers’ tastes and habits. For the case of a carbon tax, it has been argued that likeness should be determined by comparing two similar products with the same carbon footprint, and not similar products with different carbon footprints. This should happen because the national carbon-BTA legislation is already distinguishing in the domestic market between domestic high and low carbon polluters and their products, and is treating them differently (Pauwelyn 2013). Moreover, in order to avoid discrimination, the same method of measuring CO₂ must be used for all products, imported and domestic. All taxes have to be applied in a manner that does not “afford protection” to domestic products. The wording, goals and application methods of the legislation should be entirely origin-neutral, and any differences in treatment would have to be explained by reasons other than geographic origin (Hillman 2013). Finally, the offset domestic carbon tax must be “indirect.” The WTO does not allow its member states to counter personal taxes, property taxes or income taxes with BTAs. This requirement should not be difficult to meet, since generally, genuine carbon taxes, determined entirely based on emissions, are considered indirect taxes (Hillman 2013; Horn and Mavroidis 2011).

ONE BAD APPLE WILL NOT SPOIL THE BUNCH: HOW CAN A DISCRIMINATORY BTA STILL SURVIVE WTO SCRUTINY?

Even when a WTO panel finds that BTAs discriminate between two products of foreign origin, or between a domestic and a foreign product, WTO law has one more set of considerations that a country can utilize to explain why the legislation introducing the discriminatory measure is necessary. In particular, the WTO allows for exceptions from non-discrimination rules for reasons such as human, animal and plant health and life, public morals, or exhaustible natural resources. These exceptions appear in article XX of the GATT and become applicable once a country has failed to pass the economic test outlined in the previous section and some form of unequal treatment has been found. CO₂ emissions could be justified under paragraph (g) of article XX, which discusses exceptions to most-favoured nation and national treatment for the conservation of exhaustible natural resources. When article XX becomes relevant, the panels and Appellate Body no longer examine the amount of tax applied, but instead focus on the domestic environmental policy and whether it is appropriate for the problem it attempts to solve. Article XX (g) requires that similar restrictions, such as taxation, be imposed not only on imports but also on domestic products. This means that a country cannot impose a BTA on imports only: a CO₂ tax must be imposed simultaneously for domestic products. Generally speaking, the article XX (g) threshold is easy to reach if domestic legislation serves a legitimate environmental purpose, avoids observable protectionism and is consistently applied (Hillman 2013).

Article XX exceptions are qualified by the chapeau, the introductory paragraph to the article, which sets a much more difficult threshold for countries to reach. It focuses on the application of the carbon tax and BTA, which must be applied in a way that is not “a means of arbitrary and unjustifiable discrimination.” Countries imposing such legislation should, under the chapeau of article XX, take into account varying conditions in different parts of the world. For example, consideration for the needs of least-developed countries would indicate that the legislation is applied in a non-arbitrary manner (Pauwelyn 2013).

Another condition imposed by the article XX chapeau is that the legislation cannot be a “disguised restriction on international trade.” Consideration for local circumstances, environmental negotiations conducted in good faith and respect for basic fairness and due process have all been used by WTO judges in order to determine whether the application of article XX exceptions are disguised restrictions to trade (see Figure 2).

To strengthen its case before the WTO, a country could take steps to demonstrate a firm commitment to the environment instead of discriminatory and trade-

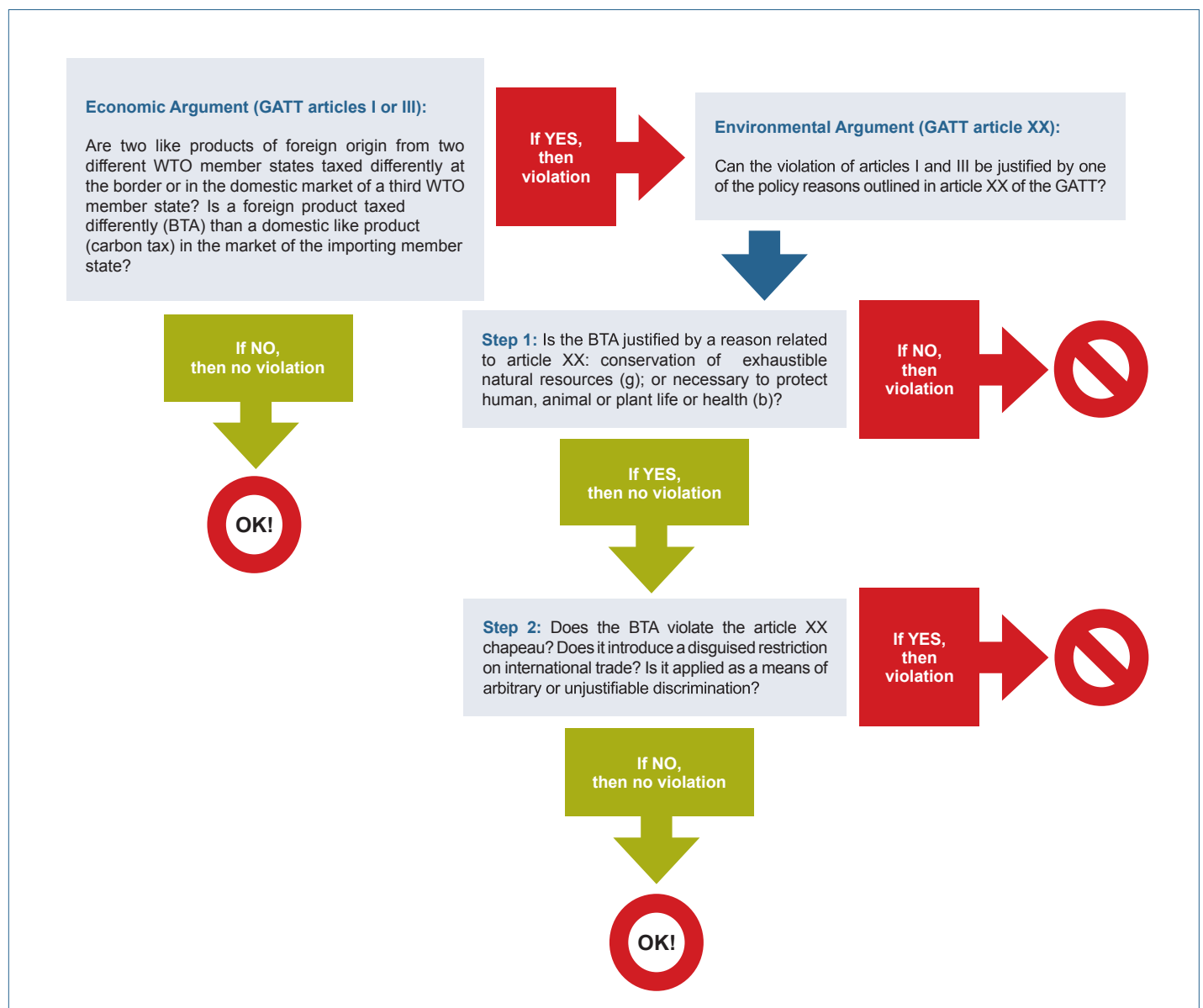
distorting tendencies (Hillman 2013). For example, the European Union, the United States or Canada could give all or part of the tax revenues collected in the context of carbon-environmental legislation to research and development related to the conservation of the environment. Another idea for the use of the tax revenues would be toward developing country assistance. Developed countries could support the establishment of environmental studies at universities in developing countries. They could also finance new carbon-friendly infrastructure and technologies for small industries with a high carbon footprint. Such initiatives would not only help with long-term international convergence on environmental protection, they would also help the taxing country pass article XX chapeau scrutiny.

ENVIRONMENTAL FEDERALISM AND BTAs

As already mentioned, if carbon taxes are applied only to domestic products, such legislation does not violate any of the WTO agreements. Moreover, unilateral action on behalf of subnational entities, such as California or British Columbia, is permissible domestically. However, provinces and states cannot themselves offset their carbon taxes by imposing a BTA affecting foreign products. For a BTA to be legal, it requires tax legislation at the federal level (Courchene and Allan 2011; Tang 2011). First, BTAs must be imposed at the federal level because such legislation on imports is usually reserved for the federal government.

Second, with respect to the WTO, federal action is required for a very practical reason: under the GATT, the treatment of foreign products with high CO₂ emissions is compared

Figure 2: Determining WTO Violations



Source: Author.

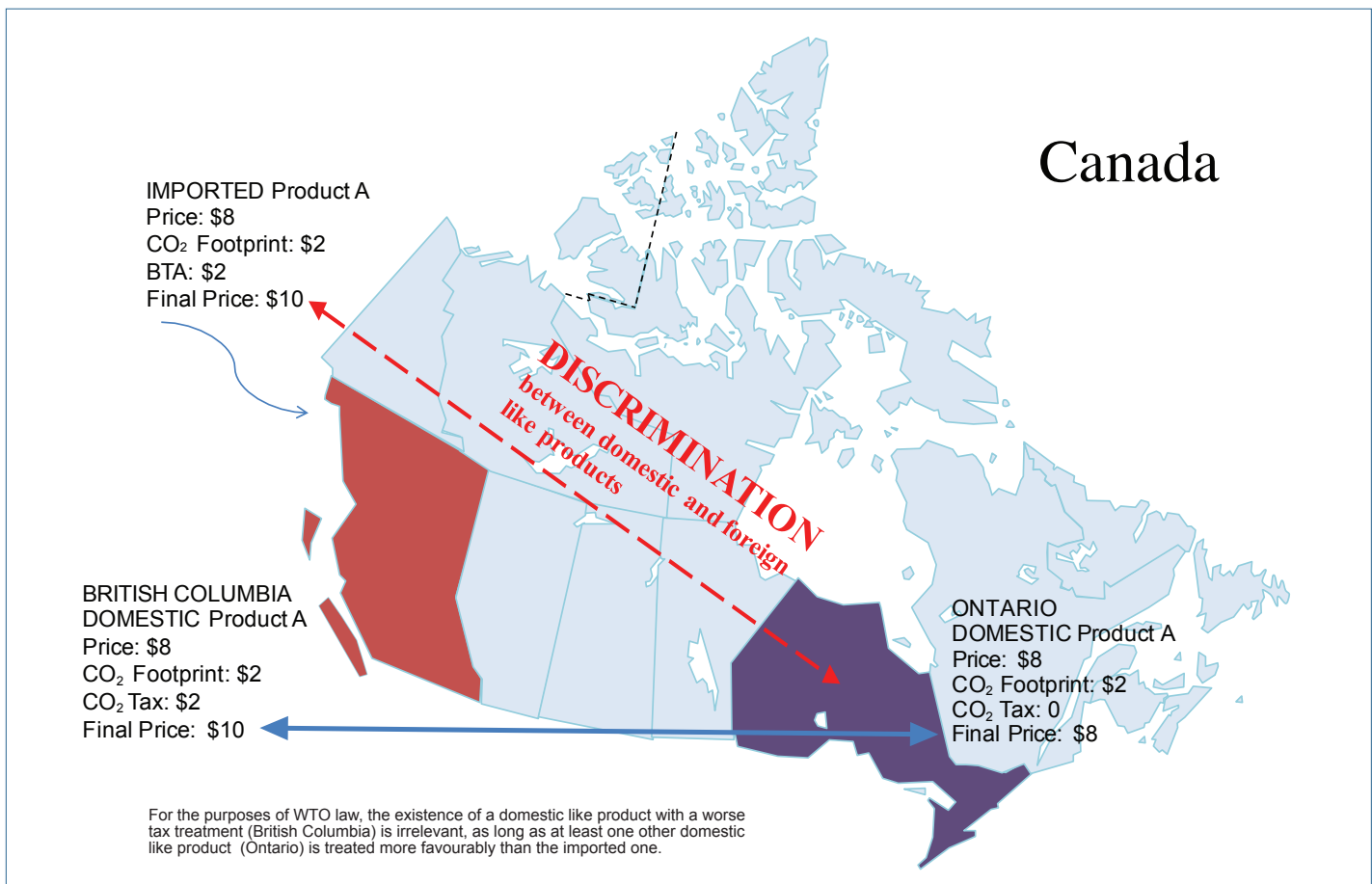
to similar domestic products with the same CO₂ emissions. If only one of the provinces taxes products with high CO₂ emissions, then there exist two identical domestic products (with even the same CO₂ footprint), which are taxed differently: one is not taxed for its CO₂ emissions. For the purposes of the GATT and the WTO, whether the “like” CO₂-culprit products originate from British Columbia and are taxed, or from a province that does not impose such a tax, is immaterial. The two products are indistinguishable under WTO law. If there is *any* domestic product not taxed, and its foreign equivalent is subject to a BTA, this constitutes impermissible discrimination in WTO law as the domestic product is treated more favourably than the imported one (see Figure 3).

Thus, in order to benefit from the WTO-compatible offsetting BTA, federal action is necessary on two fronts. First, federal governments need to engage in coordinated efforts to harmonize treatment of high CO₂ emitters domestically, so that the BTA can offset all domestic carbon taxes. Ideally, a well-designed carbon tax can be applied on a nationwide basis. If that proves to be difficult, and optimal CO₂ legislation is politically unattainable, federal governments can assemble data in order to determine a product-by-product lowest common denominator of carbon taxes across all provinces or states for the purposes

of a BTA calculation that does not violate WTO law. Even though this would introduce a domestic form of race-to-the-bottom, at least part of the domestic carbon tax could be offset in a WTO-compatible manner. Once it is ensured that all similar products are taxed for their CO₂ emissions domestically (or the lowest carbon tax has been determined), the federal government can impose a proportional BTA and collect taxes for imported products with the same CO₂ footprint. Additionally, legislation is needed at a federal level offering rebates to exporting producers who may be taxed twice (once domestically and once abroad, in other countries with carbon tax schemes).

Using a two-step CO₂-BTA environmental legislation will make domestic taxation more politically acceptable and economically plausible. Domestic industries will not bear the burden of environmental regulation alone. Such initiatives are also more environmentally sensible. Polluted air travels and a CO₂-BTA combination targets the CO₂ emissions problem wherever it occurs, creating economic disincentives for foreign polluting industries and lax governments abroad. Initially, federal governments can focus on products that are major GHG emitters, such as fuel and cement (see, for example, Mukhopadhyay and Thomassin 2009, 143; Rubenstein 2012). Federal action can accomplish all these targets simultaneously: reduce

Figure 3: Discrimination between Domestic and Foreign Like Products



Source: Author.

local CO₂ emissions; increase revenues that can be further used to address environmental degradation; maintain competitiveness for domestic goods; avoid leakage; and render environmentally friendly production methods an economically superior option for domestic and foreign manufacturers.

ARE BTAs REALLY A WIN-WIN IN THE LONG RUN?

Notwithstanding the necessity for federal action toward a CO₂-BTA regime, the solution for effectively reducing GHG effects lies in global action taken collectively at a multilateral level, with the participation of as many countries as possible. The GHG effects cannot be targeted through taxes alone. Other methods should be used, such as the prohibition of deforestation, the creation of more carbon sinks through reforestation and a consortium of cap-and-trade regimes. Coordinated international efforts could be much more efficient than unilateral action. The absence of international cooperation perpetuates the lack of clarity with respect to the price of CO₂ emissions. Disparities in treatment of CO₂-intensive goods due to possible disagreements on the method of calculation of their actual footprint may, in the future, cause problems with WTO litigation and the determination of what constitutes discrimination. A multilateral agreement would mitigate such issues. It could also create a specialized regime for least-developed countries, through the creation, for example, of a fund to help industries in poorer nations transition to less carbon-intensive methods of production.

Such multilateral initiatives could occur even within the extant WTO framework and, in particular, under the auspices of the WTO Committee on Trade and Environment (CTE), which was created in 1994. To date, the CTE has done very little to produce any decisions that elucidate the relationship between trade and the environment, nor has it helped verify the legality of cap-and-trade, carbon tax and BTA legislative initiatives. The greenhouse effect is a global problem, but public debate, social awareness and environmental sensibility ranges, for the most part, from non-existent to lukewarm, both at the national and at the global level. Global warming consequences are not felt similarly everywhere (Trebilcock 2014, 128-29). Carbon-emitting hotspots may not experience much of the degradation to which they contribute, while, elsewhere, non-offenders may bear the burden of emissions in the form of floods and extreme weather conditions. Before environmental conditions worsen beyond reparation, international cooperation is necessary to address CO₂ emissions. Until such cooperation materializes, federal states such as Canada can at least impose across-the-board carbon taxes and BTAs, and thus help and reward environmental outliers such as British Columbia, instead of de facto punishing them by leaving them without the potential for international remedies.

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The Centre for International Governance Innovation is an independent, non-partisan think tank on international governance. Led by experienced practitioners and distinguished academics, CIGI supports research, forms networks, advances policy debate and generates ideas for multilateral governance improvements. Conducting an active agenda of research, events and publications, CIGI's interdisciplinary work includes collaboration with policy, business and academic communities around the world.

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CIGI was founded in 2001 by Jim Balsillie, then co-CEO of Research In Motion (BlackBerry), and collaborates with and gratefully acknowledges support from a number of strategic partners, in particular the Government of Canada and the Government of Ontario.

Le CIGI a été fondé en 2001 par Jim Balsillie, qui était alors co-chef de la direction de Research In Motion (BlackBerry). Il collabore avec de nombreux partenaires stratégiques et exprime sa reconnaissance du soutien reçu de ceux-ci, notamment de l'appui reçu du gouvernement du Canada et de celui du gouvernement de l'Ontario.

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