

WORKING PAPER

U.S. Federal Climate Policy and Competitiveness Concerns: The Limits and Options of International Trade Law

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CONCERNS: THE LIMITS AND OPTIONS OF INTERNATIONAL
TRADE LAW**

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I. Introduction

One of the major obstacles toward mandatory limits on greenhouse gas emissions in the United States is the impact of such limits on the international competitiveness of US firms. Limits on greenhouse gas emissions -- be they in the form of regulation, a carbon tax or a cap-and-trade system¹ -- may impose extra costs on US industries. Where foreign firms do not bear similar costs, US firms may lose their competitive edge. In particular, with a US climate policy in place, goods from countries *without* mandatory carbon restrictions -- such as China, Brazil or India -- may gain a price advantage over US goods. It is exactly this asymmetry that led the US Senate to reject the Kyoto Protocol, an international agreement that covers 55 per cent of global emissions but does not require emission cuts from developing countries. The competitiveness impact of US climate policy may play out both at home (on the US market) and abroad (on world markets). It can be particularly acute for energy-intensive manufacturers such as the iron and steel, aluminum, cement, glass, chemicals and pulp and paper industries.

This paper examines the extent to which federal climate policy could alleviate this competitiveness concern. More particularly, the paper assesses the limits imposed by World Trade Organization ("WTO") agreements on possible competitiveness provisions in future climate legislation. Such competitiveness provisions would essentially aim at leveling the playing field by imposing the same or similar costs on *imports*, as US federal climate policy imposes on *domestic* US production. To level the playing field on world markets, US *exports* could also be exempted from domestic climate restrictions. As the United States is internationally bound by WTO law, any competitiveness provision that violates WTO agreements risks a challenge by the US' trading partners before the WTO dispute settlement body. If competitiveness provisions were to be used as a sweetener to enable federal climate legislation, the WTO consistency of such provisions is, therefore, crucial.

Section II briefly examines the policy reasons for and against competitiveness provisions in climate legislation. Section III explains how competitiveness provisions can take the form of

¹ This paper only addresses government intervention that restricts greenhouse gas emissions; not subsidies that promote alternative energy sources (although such subsidies raise questions of WTO consistency of their own). In terms of ranking these different policy instruments, *The Economist* put it bluntly: "Governments can try to reduce emissions in three ways: subsidize alternatives, impose standards on products and processes, and price the greenhouse gases that cause the damage. The first is almost always a bad idea; the second should generally be avoided; the third is the way to go" (*What price carbon?* THE ECONOMIST, 17 March 2007 at 15).

trade measures, but that non-trade alternatives are also available. Section IV elaborates on the types of trade restrictions that would most likely *not* pass WTO muster (import bans, punitive tariffs, anti-dumping and anti-subsidy duties). Sections V and VI provide alternatives that may be acceptable under WTO rules:

- First, a carbon tax or emission credits requirement on imports could be framed as WTO permissible “border adjustment” of a domestic, US tax or cap-and-trade system (Section V). Crucially, if such “border adjustment” does not discriminate imports as against US products, and does not discriminate some imports as against others, this type of competitiveness provision could pass WTO scrutiny *without* any reference to the environmental exceptions in Article XX of the General Agreement on Tariffs and Trade (“GATT”).
- Second, even if “border adjustment” would *not* be permitted for process-based measures such as a domestic, US carbon tax, regulation or cap-and-trade system, and/or such “border adjustment” would be found to be discriminatory, the resulting GATT violation may still be justified by the environmental exceptions in GATT Article XX (Section VI). Such justification would then most likely center on whether, under the introductory phrase of GATT Article XX, a US carbon duty, emission credit requirement or other regulation on imports is applied on a variable scale that takes account of local conditions in foreign countries, including their own efforts to fight global warming and the level of economic development in developing countries.

Section VII concludes with a specific proposal for a competitiveness provision and the questions that it would raise under WTO law.

II. Policy reasons for and against competitiveness provisions in climate legislation

A. The benefits of a competitiveness provision

The immediate demand for competitiveness provisions is economic in nature. As a matter of fairness, affected industries want to level the competitive playing field by imposing the same costs on imports as climate legislation would impose on US production. This economic *rationale* for competitiveness provisions – although it matters under the principle of “national treatment” discussed in Section V.C -- is not likely to carry much weight in the WTO system for environmental exceptions (addressed in Section VI). That is why our attention should focus on

the non-economic, environmental reasons for competitiveness provisions. There are at least four such reasons:

- *Internalizing the social cost of carbon:* As the 2006 Stern Report points out, climate change “is the greatest and widest-ranging market failure ever seen”.² In particular, carbon emissions cause harm or social costs that are not calculated into the actual price of goods. To internalize this social cost of carbon -- assessed in the Stern Report at \$85 per tonne of CO₂³ -- government intervention is needed. However, science tells us that emissions have the same effects from wherever they arise; hence, one government alone cannot resolve the problem (climate change is, in other words, a collective action problem). International cooperation is needed. Where such cooperation fails or is insufficient (which, arguably, is the case under the Kyoto Protocol), a government can either resign itself to the problem or act unilaterally. Such unilateral action, albeit second or third best, could then include a competitiveness provision forcing at least all those goods that enter the US market to internalize the social cost of carbon.⁴
- *Carbon leakage or “emission migration”:* In a scenario where not all countries cut emissions -- that is, some countries are free-riders -- the United States may decide to cut its own emissions anyhow. Doing so may, however, lead some US companies to relocate to free-riding countries. This would not only cost US jobs and tax money, but could also increase carbon emissions elsewhere. Rather than reducing their emissions under a new US climate policy, relocated firms may then actually emit more in, for example, China or India.
- *Enabling wider and deeper emission cuts within the United States itself:* Competitiveness provisions are likely to reduce domestic business opposition against emission cuts. With a competitiveness provision in place, especially energy-intensive industries within the United States may agree to be covered by federal climate policy. Without such provision, policy makers may end up excluding a number of industries altogether, may impose lower overall cuts and/or be pressured into handing out emission allowances for free (instead of auctioning them off; a system

² STERN REVIEW ON THE ECONOMICS OF CLIMATE CHANGE (2006), Executive Summary, at i, available at http://www.hm-treasury.gov.uk/media/8AC/F7/Executive_Summary.pdf.

³ *Ibid.*, at xvi.

⁴ For a full explanation of the economic case for a competitiveness provision, in particular, border tax adjustment on carbon-intensive imports, see R. Ismer and K. Neuhoff, *Border Tax Adjustments: A Feasible Way to Address Nonparticipation in Emission Trading*, CMI Working Paper 36, January 2004, at 4-8, available at <http://ideas.repec.org/p/cam/camdae/0409.html>.

that is generally regarded as more effective).⁵ In that sense, competitiveness provisions catch two birds with one stone: lower emissions abroad *and* at home.

- *Offer an incentive for other countries to join international efforts to cut emissions:*

Competitiveness provisions would force exporters into the United States to internalize the social cost of carbon. This would offer an incentive for foreign companies doing business with the United States to reduce their emissions. Foreign governments would also be given an incentive to impose their own emission cuts, or to agree to emission cuts under an international agreement acceptable to the United States: Doing so may exclude them from US import taxes or other US regulations under a competitiveness provision. Indeed, even if the enactment of a competitiveness provision may not be politically or otherwise realistic, it must be kept in mind that the mere threat of its enactment may push countries like China to cut emissions or otherwise alleviate US concerns.⁶

B. The costs of a competitiveness provision

As noted by the 2006 Stern Review, unilateral trade barriers “are clearly second best to implementing a similar carbon price across the global economy” through international agreements.⁷ We must, therefore, remain acutely aware of the costs and risks of competitiveness provisions, five of which are summarized below.

- *Barriers to trade are inefficient:* Trade restrictions skew the optimal allocation of the world’s resources and the principle of comparative advantage. They are also costly especially for US consumers and US industries that depend on imported inputs (such as the US car industry using imported steel).

- *Competitiveness impact can be exaggerated and abused:* Even where trade barriers may be needed as second or third best solutions, competitiveness provisions risk being abused by

⁵ The current European scheme, for example, covers only 46 per cent of the EU’s total CO2 emissions and caps “only” 13,000 installations. The waste, chemicals, aluminum and transport sectors are excluded from the scheme. See Javier de Cendra, *Can Emissions Trading Schemes be Coupled with Border Tax Adjustments? An Analysis vis-à-vis WTO Law*, 15 RECIEL (2006) 131, at 133.

⁶ Recent reports indicate, for example, that China is planning to impose an export tax of 5 to 15 per cent on energy-intensive exports such iron and steel, cement, aluminum and certain chemicals. See *infra* note 116.

⁷ STERN REVIEW ON THE ECONOMICS OF CLIMATE CHANGE, *supra* note 2, Part VI: International Collective Action at 487.

importing-competing US industries for purely protectionist purposes unrelated to global warming. In this respect, the competitiveness impact of climate policy is often exaggerated. The Stern Review estimates that the cost of combating climate change now, would only be 1 per cent of global GDP, “this is equivalent to price changes of an order that we are used to dealing with all the time, through, for example, changes in exchange rates”.⁸ In the Report’s opinion, even in energy intensive sectors, “the impacts are not very high” and since the bulk of trade in many of these industries is limited to within regional blocs (such as the European Union (“EU”)), “[a]pplication of greenhouse gas policies within these blocs is likely to reduce competitive impacts dramatically”.⁹ Equally, the risk of relocation and carbon leakage can be exaggerated. At the same time, there are exceptions. One OECD study, for example, shows that if the price of one tonne of CO₂ were 15 euros, the loss of production of the cement industry in the EU would be 7.5 per cent in 2010 and that, as a result, production and emissions in the rest of the world would increase. In other words, in this instance, there would be carbon leakage.¹⁰ Moreover, the introduction of mandatory emission cuts in Europe did lead to a significant increase in the price of electricity. Since there is no competition from outside the EU, European utilities simply reflected the price of emission allowances into higher consumer prices.¹¹

- *Future cooperation:* Competitiveness provisions, and the unilateral action that comes with them, may undermine the trust necessary for future international cooperation and agreement on emission reductions. This is the potential flip-side of one of the hoped for benefits of a competitiveness provision: on the one hand, such provision may incentivize free-riders to join an international scheme; on the other hand, it may distance them even further and make it more difficult to find consensus.

- *Costly implementation:* The administration of competitiveness provisions is likely to be complex and costly. If, for example, a carbon tax or other restriction were imposed on imports, US customs would need to set up a system to collect information and decide on the carbon footprint of foreign producers. Similarly, if such restriction would require justification under

⁸ *After the Stern Review: Reflections and Responses, Building an Effective International Response to Climate Change*, February 2007, at 18, available at http://www.hm-treasury.gov.uk/media/B71/79/paper_c.pdf.

⁹ *Ibid.*

¹⁰ D. Demailly and P. Quirion, *The Competitiveness Impact of CO₂ Emissions Reduction in the Cement Sector*, COM/ENV/EPOC/CTPA/CFA (2004) final, November 2005.

¹¹ See, for instance, Egenhofer, Fujiwara and Gialoglou, *Business Consequences of the EU Emission Trading Scheme* (CEPS Report, February 2005), at 23.

GATT Article XX (discussed in Section VI), a scheme would need to be set in place that varies the tax or import restriction depending, for example, on climate legislation already in place in the country of origin of, say, the imported steel. These costs must be weighed against the benefits that can be expected from a competitiveness provision.

- *Risk of a WTO challenge:* Any competitiveness provision with a serious trade impact is likely to trigger a WTO complaint. Given the vague nature of WTO law explained below, the WTO may either uphold or strike down the provision. Importantly, however, even if future US climate legislation were found to violate WTO law (not a certainty by far), the only remedy currently offered by the WTO dispute settlement system is that the United States would then have to change its legislation as to the future (or suffer retaliation if it fails to do so); no damages for past harm are due. Hence, a competitiveness provision could be included as part of a good faith effort to tackle climate change, pursuant to a good faith interpretation of relevant WTO rules. If the effort fails, and the WTO strikes down the provision, the immediate costs would be relatively limited.

The above list of costs and risks related to competitiveness provisions may well explain why none of the legislative proposals currently before the U.S. Congress include such provisions (with the exception of a safety-valve or absolute maximum on the price of emission allowances in some bills, discussed below; a measure that does *not* imply trade restrictions on imports). Similarly, although the European scheme currently in place did include the possibility for EU member states to adapt their national allocation plan to take account of “the existence of competition from countries or entities outside the Union”, this criterion was not applied by a single member state in the first stage of EU emission cuts (ending in 2007).¹² Similarly, prominent voices – such as Noble prize winner Joseph Stiglitz¹³, French President Chirac and Prime Minister de Villepin¹⁴, EU Commissioner Verheugen¹⁵ and Michael Morris, CEO of

¹² de Cendra, *supra* note 5, at 133. Note, however, that this first phase of European emission cuts was not a success: In 2007, prices for allowances for the first phase collapsed with permits trading in March 2007 at about 1 euro or less per tonne, down from a high of over 30 euros, because more allowances were issued than were needed to cover companies’ emissions in the first phase (*Energy Chief Wants Sharp Rise in Carbon Permit*, FINANCIAL TIMES, 8 March 2007, at 2). Even in Europe, therefore, genuine internalization of the social cost of carbon is still at an early stage. When carbon reaches the level of 20 or 30 euros, let alone the Stern review’s estimate of \$85 per tonne (see *supra* note 3), pressure for competitiveness provisions is likely to rise.

¹³ Joseph Stiglitz, *A New Agenda for Global Warming*, ECONOMISTS’ VOICE, July 2006, available at <http://www.bepress.com/cgi/viewcontent.cgi?article=1210&context=ev>.

¹⁴ *M. de Villepin Propose une Taxe sur le CO2 des Produits Importés*, LE MONDE, 14 November 2006.

¹⁵ *Letter by G. Verheugen to Commission President Barroso*, 21 November 2006.

American Electric Power¹⁶ -- have called for a carbon tax or trade measures against countries not cutting carbon emissions. Yet, in response, EU Trade Commissioner Mandelson¹⁷, German Chancellor Merkel (currently holding the EU Presidency)¹⁸ and US Secretary of State Rice¹⁹ have all been quick to reject the idea.

III. Policy options to address competitiveness concerns

A. Competitiveness provisions other than trade measures

The focus of this paper is trade measures, such as a carbon tax or other border restriction on carbon-intensive imports. Competitiveness concerns can, however, also be addressed by policies other than trade instruments. Below are six such alternatives.

- *Flexibility mechanisms*: such as emissions trading, making abatement less costly by letting companies who can abate at the lowest cost do so, and sell their extra reductions to other companies whose abatement costs are higher (the latter companies can then “buy off” their reduction limits); additional flexibility can be offered where the legislation would permit the handing out of carbon credits to US firms for their carbon abating investments in developing countries, similar to the existing Clean Development Mechanism under the Kyoto Protocol.²⁰

¹⁶ *Trade is the Key to Climate Change*, Michael Morris & Edwin Hill, ENERGY DAILY, 20 February 2007, available at <http://www.ujae.org/globalwarming/hill%20morris%20article%20in%20energy%20daily%20feb%2020%2007.pdf>.

¹⁷ *Trade and Climate Change*, Speech by EU Trade Commissioner Peter Mandelson, Brussels, 18 December 2006, available at http://ec.europa.eu/commission_barroso/mandelson/speeches_articles/sppm136_en.htm (“There is one trade policy response to climate change about which I have serious doubts. That is the idea of a specific ‘climate’ tariff on countries that have not ratified Kyoto. This would be highly problematic under current WTO rules and almost impossible to implement in practice. I also suspect it would not be good politics”).

¹⁸ *Europe’s Green Summit is Seeking to Bury the Carbon Past*, FINANCIAL TIMES, 8 March 2007, at 9 (“Ms. Merkel has dismissed – at this stage – a French idea that Europe should impose a ‘Kyoto tax’ on countries that undercut European producers at the expense of the environment”).

¹⁹ *US Pours Scorn on International Greenhouse Tax Proposal*, THE SIDNEY MORNING HERALD, 20 November 2006 available at <http://www.smh.com.au/news/world/us-pours-scorn-on-international-greenhouse-tax-proposal/2006/11/19/1163871272165.html>. Australian Prime Minister Howard called the idea of a carbon tax “silly”.

²⁰ Lessons should then, however, be learned from the current Kyoto mechanism which covers not only CO₂ but also certain other gases such as HFC23, a heat-trapping gas 11,700 times stronger than CO₂. Under Kyoto’s Clean Development Mechanism, a reduction by, for example, Chinese chemical companies in HFC23 emissions can be bought by, for example, a European electricity company that cannot meet its carbon targets. However, to reduce HFC23 emissions is extremely cheap compared to the price of a CO₂ emission credit. Some accounts speak of 0.5 euros/t of HFC23 in return of 8 euros/t of carbon. Put

- *Grandfather current emission levels*: that is, hand out free permits to emitting industries up to current emission levels, thereby not imposing any immediate emission cuts and only requiring companies to buy allowances if they increase their emissions; if companies lower their emissions, they can sell the permits that they received for “free” in the market. Such grandfathering of current emission levels would, however, have the drawback of rewarding the biggest emitters, i.e., those US companies that have so far not done anything to cut their emissions. It would also make it more difficult for new companies to enter the market (thereby potentially stifling competition).
- *Industry carve-outs*: to alleviate competitiveness concerns, the legislation can exclude certain energy-intensive industries from any emission reductions²¹; the country’s overall carbon target could then still be met by reductions elsewhere.
- *Cross-subsidization*: revenues raised by auctioning emission permits could be used to lower other costs on US firms such as taxes on labor or capital, or technology development and application costs.
- *Safety-valves*: a climate policy could impose a maximum price or safety-valve above which emission permits cannot be traded in the United States; this safety-valve could also be coupled to periodic review of whether US trading partners address climate change appropriately; if US trading partners fail to act, in order to alleviate resulting competitiveness concerns, the safety-valve or ceiling price of US emission permits could then be lowered.²²
- *Promise extra emission cuts in case other countries join*: Another way to attract participation from other countries in the reduction of greenhouse gas emissions is to promise additional cuts in case other countries impose emission cuts of their own; this carrot (rather than stick) approach is exactly what Europe decided to do at the March 2007 Summit: the EU-27

differently, Europe can continue to emit, that is, for example, to expand its electricity sector, by paying a subsidy to China. See Jean-Pierre Hauet, *Vers une Taxe Compensatoire sur le Carbone Importé*, Power Point Presentation, at 15, available at http://www.beaconseil.com/site/IMG/pdf/TCCI_JPHdec06.pdf.

²¹ See *supra* note 5.

²² See, for example, the Bingaman Bill at Section 1521 and the Udall-Petri Bill at Section 5.

made a pre-commitment of a 20 per cent cut by 2020 compared with 1990 levels, with a promise to move to 30 per cent if other industrialized countries follow suit.²³

B. Trade restrictions in respect of “locally-emitted” carbon versus “foreign-emitted” carbon

Notwithstanding the above alternative, or complementary, policies to address competitiveness concerns, this paper focuses on trade instruments. Trade policy can be used in the fight against climate change not only as a stick but also as a carrot (for example, by linking trade benefits to a country’s efforts in fighting climate change²⁴). The concern of this paper is, however: When and how can the United States use its trade policy as a stick against high-carbon imports? There are generally two types of trade measures that could be used against imports in the combat against climate change:

- (1) *Import restrictions in respect of “locally-emitted” carbon:* that is, trade restrictions such as taxes, energy efficiency standards or other emission regulations in respect of the carbon emitted by imported products while they are used or consumed on US territory; a good example is the recently adopted European rule requiring that cars sold in Europe will have to cut emissions to 130g/km by 2012, or the rule that biofuels will have to make up 10 per cent of the fuel mix²⁵;
- (2) *Import restrictions in respect of “foreign-emitted” carbon:* that is, trade restrictions such as tariffs, taxes or emission regulations in respect of carbon emitted by imported products in their country (or countries) of production outside the United States; good examples are Joseph Stiglitz’s proposal for Japan, Europe and other Kyoto parties to impose anti-dumping or anti-subsidy duties on imports from the United States, the French proposal to

²³ *EU Seizes Leadership of Climate Fight*, FINANCIAL TIMES, 10-11 March 2007, at 2.

²⁴ Examples of how trade can be used as a carrot to convince other countries to make emission cuts or join an international agreement on climate change are: (1) the reported deal between the EU and Russia whereby the EU agreed to Russia’s accession to the WTO in exchange for Russia ratifying the Kyoto Protocol (see, for example, Jeffrey Frankel, *Climate Change and Trade, Links between the Kyoto Protocol and WTO*, 47 ENVIRONMENT (2005) 8 at 12; (2) European tariff preferences for goods coming from developing countries who have ratified and implemented, among other agreements, the Kyoto Protocol (Council Regulation (EC) No 980/2005 of 27 June 2005 applying a scheme of generalized tariff preferences, Annex III, Part B, item 23, available at http://trade.ec.europa.eu/doclib/docs/2005/june/tradoc_123910.pdf).

²⁵ *Europe’s Green Summit*, *supra* note 18. But for an economic ranking of possible government interventions see *supra* note 1.

impose a carbon tax on imports from all countries that refuse to cooperate in a new post-Kyoto regime as of 2012, or the suggestion by Michael Morris that emission credits accompany exports from major emitting nations that have not joined a post-Kyoto global cap-and-trade framework or otherwise capped their emissions.²⁶

Restrictions in respect of locally-emitted carbon simply bring imported products into the fold of domestic US regulations on climate change, targeting the carbon they emit *within* the United States. For as long as such restrictions do not discriminate imports as against US products, nor between imports of different origins²⁷, these restrictions are generally accepted under WTO rules. At the same time, since restrictions on locally-emitted carbon only aim at meeting *internal* US targets of emission reductions, such restrictions only very partially address the competitiveness concerns of climate policy. They make, for example, Brazilian cars or Chinese refrigerators subject to US regulations on energy efficiency; they do not at all address the competitive edge that steel from China or cement from Brazil may have because of the absence of emission cuts in China or Brazil itself. Import restrictions in respect of foreign-emitted carbon do address those concerns. Yet, because they have an extraterritorial element -- they concern carbon emitted outside US territory -- such restrictions are far more controversial.

It is these offshore-carbon restrictions that are the focus of the remainder of this paper. The next section (Section IV) sums up import restrictions that would most likely violate WTO rules (import bans; punitive tariffs; anti-dumping and anti-subsidy duties). Section V provides alternatives that stand a better chance of surviving WTO scrutiny, namely: adjustment at the border of a domestic US carbon tax, cap-and-trade system or other carbon regulation. Section VI, finally, explains how even import restrictions that violate basic WTO rules can, nonetheless, still be justified under the environmental exceptions of GATT Article XX. Note, however, that once border adjustment of US climate legislation would be permitted and non-discriminatory, there would not even be a need to go to the exceptions of GATT Article XX.

²⁶ Note also the alternative of export duties on carbon-intensive exports from, say, China. That is apparently what China has recently introduced to alleviate US and, in particular, European competitiveness concerns, see *infra* note 116.

²⁷ Discussed below in Sections V.C and D. Even if there is discrimination, it can still be justified under the environmental exception of GATT Article XX, discussed in Section VI.

IV. Import Restrictions in Respect of “Foreign-Emitted” Carbon that Would Most Likely Violate WTO Rules

Although in economic terms trade restrictions to address offshore-carbon may be little or no different depending on the form they take, in legal terms, the choice of instrument is crucial. Depending on whether the United States were to impose a tariff on imports or rather frames the adjustment in the form of a tax, anti-dumping duty, technical regulation or carbon label, the WTO consistency of competitiveness provisions can vary dramatically. This Section sums up import restrictions in respect of foreign-emitted carbon that would have no, or very little, chance of survival if they were challenged before the WTO.

A. *An import ban or punitive tariffs on imports from free-riding countries*

One can only assume that a complete ban on imports from countries that do not have carbon restrictions in place is not on the table. If such a ban, or any other quantitative restriction on imports (say, China can only export 100,000 tonnes of steel made with coal into the United States), were nonetheless imposed, it would violate the prohibition in Article XI of the GATT which imposes the general elimination of all quantitative restrictions.²⁸ Unless such violation could be justified under the environmental exceptions in GATT Article XX (see Section VI below), any such scheme would violate WTO rules.

Besides a ban, the most obvious way to sanction imports from free-riding countries is to make them subject to additional or punitive import tariffs. This not only risks a violation of the most-favored-nation (MFN) principle discussed in Section V.D (in that imports from some countries, say, China would be discriminated as against imports from other countries, say, Europe); it also risks a violation of maximum tariff levels committed to by the United States at the WTO. Under Article II of the GATT, the United States bound itself to a certain maximum ceiling of tariffs, on a product by product basis, in exchange for similar tariff reductions by US trading partners. Most of the tariffs that the United States currently applies are at, or close to, that maximum ceiling. Hence, the United States has no or little leeway to add tariffs on imports for reasons related to climate change.²⁹ Unless such violation could be justified under the

²⁸ For the line between GATT Article XI border measures and GATT Article III internal measures, see *infra* Section V.B.

²⁹ US tariff commitments can be renegotiated pursuant to GATT Article XXVIII but this is subject to consent by certain other WTO members or, in the absence thereof, a reciprocal withdrawal of tariff

environmental exceptions in GATT Article XX (see Section VI below), any punitive “carbon tariff” would violate WTO rules.

B. Anti-dumping duties against “environmental dumping”

Rather than outright punitive tariffs, a more subtle alternative could be to frame the additional customs duties on imports from countries that do not have carbon restrictions in place, as duties to offset dumping, more specifically, “environmental dumping”. In his proposal for a carbon tax, French Prime Minister de Villepin explicitly refers to “environmental dumping” as a justification for the tax.³⁰ On this view, since the price of imports from, for example, China, India or Brazil does not include the social cost of the carbon emitted during the production process of the imports – given that none of these countries impose carbon cuts -- the imports are “dumped” on the US market. According to this argument, the United States should then have the right to impose anti-dumping duties, that is, extra tariffs to offset the dumping equal to the amount of the social cost of the carbon. Doing so would correct the failure of, for example, the Indian government which did not force its producers to internalize the full cost of carbon-intensive products.

Although anti-dumping duties take the form of tariffs, they are explicitly permitted under WTO rules even if the resulting tariff exceeds a country’s maximum ceiling discussed earlier. However, this right to impose anti-dumping duties is strictly limited. The basic question is: When is an import considered to be “dumped” on, in our case, the U.S. market? What is the benchmark or “normal value” against which we must compare the price of the import? The answer is simple: The benchmark is *not* U.S. prices which would fully incorporate the cost of carbon; rather, the benchmark is normal prices in China, Brazil or India, that is, the market of the country of origin of the import. In other words, the WTO defines dumping as sales of, for example, Indian steel on the U.S. market at a price below that asked for steel *in India*. Hence, anti-dumping duties can only be levied when U.S. import prices are below *Indian* prices.³¹ For

concessions by other WTO members. Moreover, even with a higher tariff ceiling for, say, steel imports, the question of most-favored-nation violation remains.

³⁰ See *supra* note 14.

³¹ In some cases, the domestic price in the country of origin must not, or cannot be used (in case, for example, the exporting nation is not a “market economy” or in the event there are no sales of the like product in the country of origin). In that event, the import price into the United States must be compared to either (1) the price of the like product when exported to an “appropriate third country” (say, Europe); or (2) a reconstructed calculation of the cost of production in the country of origin (in our case, India) plus “a

dumping purposes, import prices are not compared to carbon-restricted U.S. prices or to an ideal market price that internalizes the social cost of carbon. Thus, for as long as, for example, India does not restrict carbon emissions within India, or otherwise taxes carbon, for Indian exports not to internalize the social cost of carbon cannot be called dumping.

C. Counterveiling duties to offset the “subsidy” of not imposing carbon restrictions

Another alternative that continues to take the form of additional tariffs on imports would be to impose so-called counterveiling duties to offset subsidization of the imports in their country of origin. Joseph Stiglitz’s proposal for a carbon duty is premised on this idea of unfair subsidies. In his words, and applied to the absence of energy taxes and emission cuts in the United States as opposed to Europe:

“subsidy means that a firm does not pay the full costs of production. Not paying the cost of damage to the environment is a subsidy, just as not paying the full costs of workers would be ... other countries should prohibit the importation of American goods produced using energy intensive technologies, or, at the very least, impose a high tax on them, to offset the subsidy that those goods currently are receiving”.³²

As with anti-dumping, the WTO explicitly permits the imposition of extra tariffs to offset a foreign subsidy, even if the resulting tariff exceeds a country’s maximum ceiling discussed earlier. However, this right to impose counterveiling duties is strictly limited. The basic question is: When is an import considered to be “subsidized”? In our example, what is the benchmark against which the absence of emission cuts or a carbon tax in, for example, China -- or, in Stiglitz’s case, the United States -- must be compared?

For government policy to qualify as a subsidy under WTO rules there must be a financial contribution by the government (say, interest free loans) or other income or price support.³³ In

reasonable amount for administrative, selling and general costs and for profits”. See Article 2 of the *WTO Anti-Dumping Agreement*. However, in both of these cases, as well, one is comparing or calculating two prices set within the regulatory context of, in our hypothetical, India. Thus, for as long as India does not impose emission cuts or otherwise taxes carbon within India, for Indian exports not to internalize the social cost of carbon cannot be called dumping.

³² *Supra* note 13 at 2.

³³ Article 1 of the *WTO Agreement on Subsidies and Counterveiling Measures*.

our example, the problem is not that the Chinese government is paying Chinese producers or is otherwise transferring funds; rather, the problem is that the government *fails to act*, that is, it fails to impose and collect a carbon tax or to otherwise force Chinese producers to internalize the full cost of carbon emitted in China.

One type of financial contribution recognized by the WTO that might, at first sight, cover this failure to act, is: “government revenue that is otherwise due is foregone or not collected”.³⁴ However, the question under this provision is: What is the benchmark for what is “otherwise due”? The WTO Appellate Body has interpreted this provision as requiring a comparison between the measure (or failure to act) in question, on the one hand, and a prevailing *domestic* standard, on the other hand. In other words, the benchmark of what is “otherwise due” is the normal or standard policy within the country in question (say, China); it is not the policy of the United States or some other internationally agreed intervention to cut emissions or to impose a carbon tax.³⁵ Hence, for as long as, for example, China does not have a general policy of restricting carbon emissions within China, for Chinese exports not to internalize the social cost of carbon cannot be called a subsidy.³⁶

Moreover, even if the failure to impose a carbon tax or to otherwise force producers to internalize the cost of carbon were to qualify as a “subsidy”, under WTO rules countervailing duties to offset subsidies by foreign governments can only be levied in case the subsidy is *specific* to “an enterprise or industry or group of enterprises or industries”.³⁷ Not imposing a carbon tax or other emission cuts is a country-wide policy and not likely to meet the specificity requirement. If so, there is no right to impose countervailing duties. Although export subsidies are deemed to

³⁴ Article 1.1(a)(ii) of the *WTO Agreement on Subsidies and Countervailing Measures*.

³⁵ Appellate Body Report on *United States - Tax Treatment For "Foreign Sales Corporations"*, WT/DS108/AB/R, adopted on 20 March 2000, at para. 90 (underlining added):

“the basis of comparison must be the tax rules applied by the Member in question [e.g. China]. To accept the argument of the United States that the comparator in determining what is “otherwise due” should be something other than the prevailing domestic standard of the Member in question would be to imply that WTO obligations somehow compel Members to choose a particular kind of tax system; this is not so. A Member, in principle, has the sovereign authority to tax any particular categories of revenue it wishes. It is also free not to tax any particular categories of revenues ... What is “otherwise due”, therefore, depends on the rules of taxation that each Member, by its own choice, establishes for itself”.

³⁶ *But* see the plan of a Chinese export tax on carbon-intensive exports, *infra* note 116.

³⁷ Article 1.2 and Article 2 of the *WTO Agreement on Subsidies and Countervailing Measures*.

be specific (there is no need to prove the specificity requirement for export subsidies)³⁸, not imposing a carbon tax at all, is not likely to be qualified as a subsidy contingent on export performance³⁹: Even goods that are not exported (i.e. consumed within China) do not pay a carbon tax. Hence, not imposing a carbon tax is most likely neither a specific subsidy nor an export subsidy.

In sum, even though in economic terms not internalizing the full cost of carbon could be seen as “dumping” or a “subsidy”, in legal-WTO terms, the failure of a government to impose a carbon tax or to otherwise force producers to internalize the full price of carbon, does not normally give other WTO members the right to impose offsetting duties on imports.

V. Import Restrictions in Respect of “Foreign-Emitted” Carbon that Stand a Better Chance to Survive WTO Scrutiny

Rather than imposing a ban, quantitative restriction or extra tariff on imports only, a better way to frame a U.S. competitiveness provision would be to portray the trade measure on imports as simply the import-equivalent of domestic U.S. climate policy. For WTO purposes, any measure that applies only to imports is suspect, as it can be presumed to be protectionist (it applies only to foreign goods; not to domestic products). That explains the outright prohibitions in GATT Article II (tariffs above a particular ceiling are prohibited) and GATT Article XI (quantitative restrictions on imports are generally prohibited). In contrast, a measure that applies to both imports and domestic products is fully accepted as long as it does not discriminate against imports (the obligation of “national treatment” discussed in Section C) or against imports from particular countries (the obligation of “most-favored-nation treatment” discussed in Section D).

The main challenge is, however, to convince the WTO that a U.S. competitiveness provision is only the extension of domestic U.S. climate policy, applied on an equal footing to imports. Section A addresses this challenge assuming that U.S. climate policy takes the form of a carbon tax or other price-based measure (such as a cap-and-trade system); Section B extends the analysis to carbon regulations (such as carbon intensity standards or labels). As will soon become

³⁸ Article 2.3 the *WTO Agreement on Subsidies and Countervailing Measures*.

³⁹ As required under Article 3.1 of the *WTO Agreement on Subsidies and Countervailing Measures* for a subsidy to be a prohibited export subsidy.

apparent “border adjustment” for taxes or other price-based measure (Section A) is easier to justify under WTO rules as compared to “border adjustment” for regulations (Section B).

A. “Border tax adjustment” based on a domestic, U.S. carbon tax or cap-and-trade system

If a U.S. competitiveness provision were to take the form of a price-based measure such as a duty, charge or tax on carbon-intensive imports, the line between (generally prohibited) border tariffs and (generally permitted) domestic taxes is set out in GATT Article II:2(a). This provision explains that the GATT’s strict rules on maximum tariff ceilings do not prevent the United States

“from imposing at any time on the importation of any product ... a charge equivalent to an internal tax ... in respect of the like domestic product or in respect of an article from which the imported product has been manufactured or produced in whole or in part”.

More specifically, such “charge[s] [on imports] equivalent to an internal tax” are not subject to GATT Article II on tariffs, but GATT Article III:2 on domestic taxes (national treatment). The right to thus impose a domestic tax on imports is also referred to as “border tax adjustment”. Under “border tax adjustment”, the flip-side of the right to impose a domestic tax also on imports is the right to rebate the same tax on domestic products that get exported. Under WTO rules, such rebates are not considered to be prohibited export subsidies.⁴⁰

Yet, not every internal tax can be adjusted at the border: The tax must be one “in respect of ... product[s]” or “article[s]” used to manufacture or produce products.⁴¹ In other words, it must be an “internal tax or other internal charge of any kind ... applied, directly or indirectly, to ...products”.⁴² Put differently, generally speaking, U.S. *product* taxes can be adjusted and

⁴⁰ GATT Article VI:4 and *Ad Note* to GATT Article XVI. See also footnote 1 and paragraphs (g) and (h) of Annex I to the *Agreement on Subsidies and Countervailing Duties*. The *Working Party on Border Tax Adjustments* (*infra* note 43, at para. 10) found that rules on rebates for exports and taxes on imports are equivalent: “it was agreed that GATT provisions on tax adjustment applied the principle of destination identically to imports and exports”.

⁴¹ GATT Article II:2(a).

⁴² GATT Article III:2. On the export side, rebates are permitted for “duties or taxes borne by ... product[s]” (see GATT Article VI:4, *Ad Note* to GATT Article XVI and footnote 1 to the *Agreement on Subsidies and Countervailing Measures*). Paragraphs (g) and (h) of Annex I to the *Agreement on Subsidies*

applied to imports, not U.S. *producer* taxes.⁴³ Adjustable product taxes are also referred to as “indirect taxes” such as sales, value-added and excise taxes. We find it quite normal, for example, that when Chinese TVs or French cigarettes are sold in the United States they pay the same sales or excise tax as U.S. made TVs or cigarettes. Such product or indirect taxes can be applied also to imports. In contrast, producer taxes or “direct taxes” such as payroll or income taxes, social security charges or taxes on profits or interests cannot be adjusted or imposed on imported products. We find it quite normal, for example, that imports from Monaco or Lichtenstein are not subject to an import tax to make up for the fact that Monaco and Lichtenstein impose much lower income taxes than the United States does. Such producer or direct taxes cannot be applied to imports.

The reason behind this distinction between, on the one hand, adjustable product or indirect taxes and, on the other hand, non-adjustable producer or direct taxes is the so-called “destination principle” according to which products themselves should only be taxed in the country of consumption (in other words: exports get a rebate; imports get taxed). On this view, if products are only taxed in their place of consumption, countries preserve the right to choose their own level of taxation *and* trade neutrality is maintained as all products in a given market compete on the same competitive terms (without either double taxation or advantages from a more favorable tax regime in their country of origin).⁴⁴ The distinction also finds some support in the economic theory that product taxes are shifted forward into consumer prices, whereas producer taxes (such as taxes on profits) are not passed on into the price of a product. Thus, on this view, producer taxes, as they do not influence product prices, do not affect the competitiveness of products and there is, therefore, no need to make adjustments for imports so as to level the economic playing field. However, it is acknowledged today that even producer taxes are to a certain degree reflected in the price of a product.⁴⁵

and Countervailing Measures refer more broadly to permissible rebates for indirect taxes “in respect of the production and distribution of exported products”.

⁴³ *Report of the Working Party on Border Tax Adjustments*, L/3464, 20 November 1970, at para. 14 (“The Working Party concluded that there was convergence of views to the effect that taxes directly levied on products were eligible for tax adjustment ... Furthermore, the Working Party concluded that there was convergence of views to the effect that certain taxes that were not directly levied on products were not eligible for tax adjustment”).

⁴⁴ Paul Demaret and Raoul Stewardson, *Border Tax Adjustments under GATT and EC Law and General Implications for Environmental Taxes*, 29 *JOURNAL OF WORLD TRADE* (1994) 5, at 6.

⁴⁵ See Christian Pitschas, *GATT/WTO Rules for Border Tax Adjustment and the Proposed European Directive Introducing a Tax on Carbon Dioxide Emissions and Energy*, 24 *GA. J. INT’L & COMP. L.* (1994-1995) 479 at 485. Be that as it may, calculating how much of a producer or direct tax shifts forward into consumer prices is extremely difficult and any corresponding border adjustment is open to abuse. As one

So, assuming (for now) that U.S. federal climate policy for domestic U.S. businesses takes the form of a carbon tax, would such domestic carbon tax be regarded as an adjustable product tax that can be imposed also on imports for carbon produced abroad? Or would the WTO classify it as a producer (or direct) tax which cannot be adjusted at the border for imports? This is a long-standing debate and no definite answer can be given.⁴⁶ On the one hand, following the definitions of “direct” versus “indirect” taxes in the WTO *Agreement on Subsidies and Countervailing Measures*, a carbon tax is clearly an “indirect tax” and thus, in principle, adjustable.⁴⁷ On the other hand, it remains unclear whether a tax on inputs which are not physically incorporated into the final product (such as a tax on carbon emitted in, say, China but not, of course, physically present in the steel imported into the United States) can be adjusted at the border. These so-called “hidden taxes” (or *taxes occultes*) target not the physical features of the imported product itself, but rather the process or production method of the product abroad, that is, the fact that when producing, say, steel in China, carbon was emitted *in China*.

The 1970 GATT Working Party Report on Border Tax Adjustments left the question, of whether hidden or process taxes can be adjusted at the border, unanswered.⁴⁸ A 1987 GATT panel report in the *U.S. – Superfund* dispute, however, did permit the United States to impose a domestic tax on certain chemicals also on imports that had used the same chemicals “as materials

study concluded, “[w]hile a blanket prohibition [on adjustment for producer or direct taxes] may not reflect economic reality ... it reduces the possibility of serious trade disputes arising due to arbitrary impositions ... [hence] for practical reasons, there is no real prospect of the distinction being abandoned” (Demaret and Stewardson, *supra* note 44 at 16).

⁴⁶ Given the discussion below it is, however, surprising how on the WTO website the following categorical statement could, until very recently, be found: “Under existing GATT rules and jurisprudence, ‘product’ taxes and charges can be adjusted at the border, but ‘process’ taxes and charges by and large cannot. For example, a domestic tax on fuel can be applied perfectly legitimately to imported fuel, but a tax on the energy consumed in producing a ton of steel cannot be applied to imported steel” (available until December 2006 at http://www.wto.org/english/tratop_e/envir_backgrnd_e/c3s3_e.htm).

⁴⁷ Footnote 58 of the *Agreement on Subsidies and Countervailing Measures* states: “The term ‘direct taxes’ shall mean taxes on wages, profits, interests, rents, royalties, and all other forms of income, and taxes on the ownership of real property”. In contrast, “[t]he term ‘indirect taxes’ shall mean sales, excise, turnover, value added, franchise, stamp, transfer, inventory and equipment taxes, border taxes and all taxes other than direct taxes and import charges”. A carbon tax is a specific excise tax and, in that sense at least, an indirect or product tax; it is not any of the types listed under ‘direct taxes’; hence, a carbon tax is, in any event, an ‘indirect tax’ as it is “other than direct taxes”. The question remains, however, to what extent these definitions in the *Agreement on Subsidies and Countervailing Measures* on border adjustment for exports can be used also for purposes of interpreting GATT provisions on border adjustment for imports. In support of import-export equivalence see *supra* note 40.

⁴⁸ *Supra* note 43 at para. 15: “It was generally felt that while this area of taxation was unclear, its importance – as indicated by the scarcity of complaints reported in connection with adjustment of *taxes occultes* – was not such as to justify further examination”.

in the manufacture or production” of these imports.⁴⁹ Importantly, the panel did not specify whether these chemicals still had to be physically present in the imported product. Even more to the point, the United States introduced a tax on ozone depleting chemicals and applied this tax also to imports of such chemicals or products containing or produced with such chemicals. No GATT or WTO decision was ever rendered on this tax, but like border adjustment for a carbon tax, this tax on ozone depleting chemicals is process-related; not related to the physical characteristics of the final imported product.⁵⁰

The question is, ultimately, how broadly the WTO Appellate Body would interpret the words “internal taxes ... applied ... indirectly, to ... products” in GATT Article III:2⁵¹ and corresponding provisions in the *Agreement on Subsidies and Countervailing Measures*.⁵² The very idea of a carbon tax is to internalize the social cost of carbon in the ultimate price of products so as to give an incentive to both producers and consumers to limit the use of carbon-intensive products and to shift to greener energy. From that perspective, a carbon tax is an indirect tax applied at least “indirectly” to products. As the very reason for the tax is to make carbon-intensive products more expensive, the tax does (or should) shift forward to consumers and therefore could be said to be adjustable at the border. The tax will, in other words, change the terms of competition, and to ensure trade neutrality the tax of the country of consumption

⁴⁹ Panel Report on *United States – Taxes on Petroleum and Certain Imported Substances*, GATT, BISD 34S/136 (June 17, 1987), at para. 2.5 and para. 5.2.4.

⁵⁰ See Frank Biermann and Rainer Brohm, *Implementing the Kyoto Protocol without the USA: The Strategic Role of Energy Tax Adjustments at the Border*, 4 CLIMATE POLICY (2005) 289, at 294. It is also interesting to recall that when the US House of Representatives passed an energy tax on all fuels based on the heat content (or Btu, British Thermal Unit) of the particular fuel, it included a provision for a border tax adjustment, which was then criticized by the EC as a GATT violation. See Steve Charnovitz, *Trade and Climate: Potential Conflicts and Synergies*, in BEYOND KYOTO: ADVANCING THE INTERNATIONAL EFFORT AGAINST CLIMATE CHANGE, 141 at 147.

⁵¹ The corresponding provision in GATT Article II:2(a) refers to internal taxes “in respect of an article from which the imported product has been manufactured or produced”. Such “article” could be interpreted as including the energy (and resulting carbon) used to produce the product. However, the equally authentic French text refers to “*une merchandise qui a été incorporée dans l'article importé*” which seems to require that the input is physically incorporated into the imported product.

⁵² The corresponding provision for border rebates upon exportation is broader. Paragraph (g) of Annex I to the *Agreement on Subsidies and Countervailing Measures* permits border tax adjustment for exports more broadly for indirect taxes “in respect of the production and distribution of exported products”. This could arguably cover process or production-related taxes such as a carbon tax. Paragraph (h) of Annex I, in turn, explicitly permits border tax adjustment upon exportation for a certain type of indirect taxes (namely, prior-stage cumulative indirect taxes) even when such taxes are “levied on inputs that are consumed in the production of the exported product” including not only “inputs physically incorporated” but also “energy, fuels and oil used in the production process” (Footnote 61). Yet, specific environmental taxes such as a carbon tax are not “cumulative” indirect taxes and thus not covered by paragraph (h); as a result, they fall under the more general provision of paragraph (g). See J. Andrew Hoerner and Frank Muller, *Carbon Taxes for Climate Protection in a Competitive World*, A Paper Prepared for the Swiss Federal Office for Foreign Economic Affairs, June 1996, at 33-34.

should apply; hence, border tax adjustment could, in principle, be permitted. Put differently, under a carbon tax, the “nexus” between the tax and the products concerned (say, steel or cement) appears to be tight enough so as to allow adjustment (this “nexus” is, in any event, tighter than under many other process taxes such as social security and wage taxes).⁵³

So far we have assumed that U.S. federal climate policy on domestic, U.S. businesses would take the form of a carbon tax. What, however, if U.S. federal climate policy does not take the form of a carbon tax, but rather a cap-and-trade system? Can the WTO provisions on border tax adjustment be used to offset such cap-and-trade system? Clearly, if border tax adjustment for a carbon tax may be difficult under WTO rules (as explained above), border tax adjustment for a cap-and-trade system becomes even more complicated. In that event, the following *additional* question arises: Can the obligation to hold emission credits or allowances up to one’s actual level of carbon emissions be qualified as an “internal tax or other internal charge of any kind” which, under GATT Article III:2, can be imposed also on imports?⁵⁴ The general definition of a tax is a compulsory contribution imposed by the government for which taxpayers receive nothing identifiable in return.⁵⁵ The need to hold a permit for emitting CO₂ almost exclusively serves the interests of the wider community; companies subject to the obligation do not receive anything specific or identifiable in return (as compared to, for example, a highway fee, where in return for the fee a driver gets to use the highway). Thus, in principle, the cost of having to present an emission credit can qualify as a tax.⁵⁶

What happens if, under a cap-and-trade mechanism, allowances are handed out *for free* by the government (as most European governments decided to do under the first phase of the European system⁵⁷)? One could argue that there is then no contribution imposed by the government and hence no internal tax and no possibility to impose border tax adjustments for

⁵³ A recent WTO panel report (*Mexico – Taxes on Soft Drinks*, WT/DS308/R, 23 March 2006, paras. 8.42-45) elaborates on the required “nexus” between the tax and the products it affects. The panel found that GATT Article III:2 “requires some connection, even if indirect, between the respective taxes or other internal charges, on the one hand, and the taxed product, on the other”. It found that a tax on soft drinks containing sweeteners other than cane sugar is a tax applied “indirectly” to beet sugar, among other reasons, because “the burden of the tax can be expected to fall, at least in part, on the products containing the sweetener, and thereby to fall on the sweetener”. Even a distribution tax on soft drinks containing certain sweeteners was found to be a tax applied “indirectly” to beet sugar, although the panel admitted that, in that instance, “the degree of connection between the tax and the relevant products is more remote”.

⁵⁴ GATT Article II:2(a) only refers to an “internal tax” but cross-refers to Article III:2 so that it can be argued that the broader reference to “internal taxes or other internal charges of any kind” is controlling.

⁵⁵ Ismer and Neuhoff, *supra* note 4 at 11, referring to an OECD definition.

⁵⁶ In support: Ismer and Neuhoff, *supra* note 4, at 11 and de Cendra, *supra* note 5, at 135-136.

⁵⁷ See de Cendra, *supra* note 5, at 135.

imports.⁵⁸ On the other hand, the requirement to hold an allowance for every ton of carbon emitted (even if the allowance was handed out for free) does impose an opportunity cost: if emissions are cut, the allowance could be sold on the market. To that extent, even free allowances impose a cost or tax that could arguably be adjusted at the border for imports. What happens if some of a company's allowances are handed out for free and others must be bought at auction? Some authors have suggested that in this case border tax adjustments can be imposed on imports using the *average cost* of the allowances. That is, if, for example, half of the allowances are allocated to each business free of charge and the second half had to be bought at a price of 100, the price used for the adjustment would be 50.⁵⁹ Another proposal in this context is to tax imports at the *market price* at which allowances are sold.⁶⁰ Under rational expectations, this market price can be assumed to be equal to the (higher) price paid at auction (in our case, 100).⁶¹ In that case, however, the claim may be made that imports (paying 100) are discriminated as against domestic producers (who received 50 per cent of their allowances for free), in violation of GATT Article III (discussed in Section C below).

What if both US federal climate policy for domestic, US businesses *and* the adjustment for imports take the form, not of a carbon tax, but of a requirement to hold emission allowances up to the amount of carbon emitted (either *within* the United States by the particular US business; or, for imports, the carbon emitted *abroad* in the production of the import)? That is, for example, what Michael Morris, CEO of American Electric Power, recently proposed, namely that *emission credits* accompany exports from major emitting nations that have not joined a post-Kyoto global cap-and-trade framework or otherwise capped their emissions.⁶² Applying WTO rules on border tax adjustment to such scheme would, obviously, be further complicated as in this case both the domestic measure and the adjustment at the border do not take the explicit form of a tax. Yet, if, as explained above, a domestic requirement to hold emission allowances could be qualified as, in

⁵⁸ Indeed, some have argued that the free allocation of emission allowances (rather than a tax) is actually a subsidy that could be challenged under WTO rules. For a discussion see de Cendra, *supra* note 5, at 136-138.

⁵⁹ Ismer and Neuhoff, *supra* note 4, at 11.

⁶⁰ Ismer and Neuhoff, *supra* note 4, at 11. Similarly, Jean-Pierre Huet, *supra* note 20, proposes a tax on imports based on the amount of carbon used in the production of the import multiplied by the unit price for carbon as it is traded in the European system averaged over the previous six months.

⁶¹ Ismer and Neuhoff, *supra* note 4, at 11, footnote 28. In this case, in particular, the question would arise of whether the free allocation of allowances – essentially a lump sum transfer to domestic firms – would run afoul of WTO rules against subsidies. See *supra* note 58.

⁶² This proposal does, however, raise the question of where exporters could buy these allowances? Presumably on the US market. However, if that would be the case, the total amount of allowances (or cap) would have to be increased so as to take account of carbon emitted by imports; if not, the price for allowances handed out with only internal US emissions in mind, would sky-rocket.

effect, an “internal tax or other internal charge of any kind” under GATT Article III:2, then so could the requirement to hold allowances for imports at the border. GATT Article II:2(a) on border tax adjustments permits adjustment in the form of “a charge equivalent to an internal tax”. The border requirement to hold an allowance is then arguably a “charge” which is “equivalent” to the internal requirement for US businesses to hold allowances which, in turn, is a kind of “internal tax”.

Political and other reasons within the United States may prevent policy makers from calling climate legislation a form of “tax”. Raising taxes is not particularly palatable for most US politicians. Yet, for WTO purposes, if climate legislation can be defined as a product “tax”, both as it applies to US businesses and imports, the legislation can more easily be justified under WTO requirements through the use of WTO rules on border tax adjustment. The reason is that under trade law, price-based measures such as taxes are regarded as more transparent and economically more efficient than regulation.⁶³ Hence, generally speaking, WTO rules push countries to adopt price-based measures such as tariffs or taxes, rather than quantitative import restrictions or trade restrictive regulation.

B. “Border adjustment” based on a domestic, US carbon “regulation”

In the previous section we have assumed that a US competitiveness provision would take the form of a price-based measure such as a tax or other charge on imports (or a measure, such as the requirement to hold emission allowances, that could be qualified as a “tax or other charge”). If so, it can be argued that WTO rules on border tax adjustment permit the imposition of such tax or other charge on imports as long as such tax is equivalent to the tax or other charge imposed on domestic US products. What now if the US competitiveness provision would take the form of a trade restrictive regulation on imports (or if, contrary to the argument made above, the requirement to hold emission allowances is *not* classified as a tax but as a regulation)? One could imagine, for example, that the United States imposes maximum carbon intensity standards (tons carbon equivalent emitted per ton of product produced) for energy-intensive products sold on the US market regardless of origin. A less trade restrictive type of carbon regulation would, for example, be to label all energy-intensive products as “harmful to our climate”.

⁶³ See also *supra* note 1.

In this case, the line between generally prohibited quantitative restrictions (GATT Article XI) and generally permitted domestic regulation (GATT Article III:4) is set out in an *Ad Note* to GATT Article III. This provision explains that

“any law, regulation or requirement ... which applies to an imported product and to the like domestic product and is collected or enforced in the case of the imported product at the time or point of importation, is nevertheless to be regarded as ... a law, regulation or requirement ... subject to the provisions of Article III”.

In other words, even if US climate legislation were to restrict imports at the border, if it is applied also domestically in respect of US products, it should, in principle, fall under the more flexible GATT Article III (permitting regulations for as long as they are not discriminatory) rather than the stringent GATT Article XI (generally prohibiting quantitative import restrictions).⁶⁴

Yet, as is the case for taxes and permissible border tax adjustment, not all domestic regulations can be applied to imports at the border. The *Ad Note* limits border adjustable regulations to “any law, regulation or requirement of the kind referred to in paragraph 1 [of Article III]”. GATT Article III:1, in turn, is limited to “laws, regulations and requirements affecting the internal sale, offering for sale, purchase, transportation, distribution or use of products.”

As was the case for possible border tax adjustment in respect of carbon taxes, the question is whether a carbon regulation which, after all, targets the process or production method of, say, imported steel -- not the physical characteristics of the steel itself -- can be classified as a regulation “affecting ... products”. Put differently, is border adjustment for regulations limited to “product” measures or does it extend also to “process” measures? Two unadopted GATT panel reports found that “process” measures fall outside the scope of GATT Article III and must, instead, be presumed to be prohibited under GATT Article XI. These reports were issued -- though never formally adopted by GATT parties -- in the famous *Tuna – Dolphin* dispute where a US ban on certain tuna captured in a way that risks killing dolphin was found to violate GATT Article XI and not justified under the environmental exceptions in GATT Article XX (discussed below in Section VI).

⁶⁴ Discussed earlier when referring to a complete ban or other quantitative restriction on imports from countries without emissions cuts in place, *supra* note 28.

The first *Tuna – Dolphin* panel explained the exclusion of “process” measures – such as carbon regulations – from the scope of permissible border adjustment under GATT Article III as follows:

“under the national treatment principle of Article III, contracting parties may apply border tax adjustments with regard to those taxes that are borne by products, but not for domestic taxes not directly levied on products (such as corporate income taxes). Consequently, the Note Ad Article III covers only internal taxes that are borne by products. The Panel considered that it would be inconsistent to limit the application of this Note to taxes that are borne by products while permitting its application to regulations not applied to the product as such”.⁶⁵

Put differently, according to this panel, as is the case for taxes, regulations as well can only be adjusted at the border if they “apply to the product as such”; not if they regulate the producer. As the US domestic restriction on tuna harvesting “did not regulate tuna products as such ... Nor did it prescribe fishing techniques that could have an effect on tuna as a product”⁶⁶, the GATT panel found that the regulation could *not* be adjusted at the border for imported tuna. Hence, the US tuna ban was not covered by GATT Article III, but instead fell under (and automatically violated) GATT Article XI.

Although the *Tuna – Dolphin* panels would almost certainly have decided against border adjustment for carbon regulations, the fact remains that these panels were never adopted and that WTO thinking on the issue of border adjustment has evolved, as discussed in Section A above. Indeed, if the argument is that there must be broad equivalence between border adjustment for taxes and border adjustment for regulations (as the first *Tuna – Dolphin* panel itself found), then many of the arguments discussed in Section A above in support of permitting border adjustment for carbon *taxes* also support border adjustment for carbon *regulations*. Ultimately, the question is, once more, how broadly the WTO Appellate Body would interpret the words “regulations ... affecting ... products” in GATT Article III:1 and 4. As with border tax adjustment, some line must be drawn between purely producer regulations that cannot be adjusted at the border, and

⁶⁵ GATT Panel report on *United States – Restrictions on Imports of Tuna*, DS21/R, 3 September 1991, BISD 39S/155, at 5.13

⁶⁶ *Ibid.*, para. 5.10.

product-related regulations that can be adjusted at the border. However, this does not necessarily mean that all process regulations are by definition not adjustable. If they sufficiently “affect” the “product”, that is, if, for example, their very purpose is to internalize certain negative externalities otherwise not reflected in product prices, they could be found to be subject to GATT Article III. From that perspective, the “nexus” between a carbon regulation and the products affected by it (say, carbon-intensive steel or cement), could be found to be tight enough so as to permit a finding that the carbon regulation is one “affecting ... products” in the sense of GATT Article III:4 and, therefore, adjustable at the border.⁶⁷

At the same time, for process regulations -- as opposed to process taxes -- we do not have the above explained flexibilities set out in GATT Article III:2 (i.e., the reference to taxes “applied indirectly” to products), nor those set out in the *Agreement on Subsidies and Countervailing Measures*. Indeed, the *Agreement on Subsidies and Countervailing Measures* only allows adjustment upon exportation (i.e. rebates) for taxes or duties, not for regulations. Therefore, the broad definition of “indirect” taxes; the reference to taxes “in respect of the production” of exported products; and the inclusion of certain energy taxes, do not broaden the adjustability of process *regulations*.⁶⁸ Moreover, the mere fact that a regulation increases the price of a product cannot, in and of itself, be sufficient for the regulation to be adjustable at the border (if not, a higher minimum wage in the United States as opposed to China, which arguably increases US product prices, might also become adjustable). To avoid such slippery slope a closer “nexus” between the regulation and the product affected by it must be demonstrated (which, for carbon regulations, is not impossible⁶⁹). In the end, it would, therefore, be easier to adjust taxes at the border as compared to regulations, something that is not at all surprising given the preference (explained earlier⁷⁰) that trade law holds for taxes over regulations on the ground that the former are more transparent and efficient than the latter.

Even if a carbon regulation may not be adjustable at the border under GATT rules, there does remain the possibility that the extension of a domestic, U.S. carbon regulation to imports is justified by the *Agreement on Technical Barriers to Trade*. This agreement applies to both technical regulations “which lay down product characteristics”, that is, features inherent in the

⁶⁷ For a panel report interpreting this “nexus” relatively broadly, see *Mexico – Soft Drinks*, discussed *supra* note 53.

⁶⁸ All of which are discussed *supra* in note 52.

⁶⁹ See *supra* text at note 67 and note 53.

⁷⁰ See *supra* text at note 63.

product itself, “and their related processes and production methods”.⁷¹ Although this might be read as including only process regulations that leave a trace in the end product itself (as the process and production method must be “related to” the product characteristics), any carbon regulation that addresses “terminology, symbols, packaging, marking or labeling requirements” would be covered by the *Agreement on Technical Barriers to Trade*, as such requirements are covered as soon as they apply to “a product, process or production method” without the “related to” *caveat*.⁷² In other words, a carbon label for energy-intensive products including imports would seem to fall under the *Agreement on Technical Barriers to Trade*. It is more doubtful, however, whether, for example, a maximum carbon intensity standard would be so covered, as such standard is not limited to “marking or labeling” but actually prohibits certain high-carbon products to be marketed in the first place. Such standard would, therefore, be subject to the *caveat* that the process method must be “related to” the end product’s characteristics. This may not be the case as no carbon traces are left in the end product itself.⁷³

Once covered by the *Agreement on Technical Barriers to Trade* a carbon label or regulation on imports can be justified if it is, among other things, non-discriminatory (see Sections C and D) and “not more trade-restrictive than necessary to fulfill a legitimate objective ... *inter alia*: protection of the environment”.⁷⁴ The latter requirement will involve an analysis similar to that under GATT Article XX discussed in Section VI.

C. *National treatment: no discrimination of imports as against like US products*

Even if border adjustment were permitted for US carbon taxes and/or US carbon regulations, that is not the end of the story. Once found to be covered by GATT Article III, the

⁷¹ *Agreement on Technical Barriers to Trade*, Annex I, paragraph 1.

⁷² *Ibid.*

⁷³ In *EC – Measures Affecting Asbestos and Asbestos-Containing Products* (WT/DS135/AB/R, 12 March 2001, at para. 67), the Appellate Body clarified that “the ‘characteristics’ of a product include, in our view, any objectively definable ‘features’, ‘qualities’, ‘attributes’, or other ‘distinguishing mark’ of a product. Such ‘characteristics’ might relate, *inter alia*, to a product’s composition, size, shape, colour, texture, hardness, tensile strength, flammability, conductivity, density, or viscosity”. However, it went on to state that “product characteristics include, not only features and qualities intrinsic to the product itself, but also related ‘characteristics’, such as the means of identification, the presentation and the appearance of a product”.

⁷⁴ *Agreement on Technical Barriers to Trade*, Article 2.2.

carbon tax or regulation must also meet the substantive test in that provision.⁷⁵ This test essentially requires that imported products are not treated less favorably than like domestic products. A crucial question in this respect is which products can thus be compared? The answer is: Only imports and domestic products that are “like”.⁷⁶ Assuming that US climate legislation would apply equally to imports as opposed to domestic products (that is, US steel made with coal would be subject to the same restrictions as imported, Chinese steel made with coal), for our purposes, the issue is primarily whether, for example, steel from China made with coal (subject to a *high* carbon tax or regulation) is “like” domestically produced US steel using natural gas (subject to a *lower* carbon tax or regulation). In other words, one would not expect that US climate legislation will explicitly (or *de jure*) distinguish based on national origin; yet, the question remains whether, by taxing one type of steel differently than the other, US legislation distinguishes, in effect (or *de facto*), based on nationality.

On the one hand, it would be rather odd for the WTO to intervene in this question of differentiating between types of steel depending on their carbon footprint, once the WTO has earlier accepted that carbon taxes or regulations can be adjusted at the border.⁷⁷ In the *US – Superfund* case, for example, the panel found that “the tax on certain chemicals, being a tax directly imposed on products, was eligible for border tax adjustment independent of the purpose it served”.⁷⁸ In addition, under the substantive test of GATT Article III itself, the panel never questioned whether (taxed) imports produced with the chemicals were “like” US products not produced with the chemicals. Once it found that the tax was adjustable at the border, the panel simply “did not examine whether the tax on chemicals served environmental purposes and, if so, whether a border tax adjustment would be consistent with these purposes”.⁷⁹ If this approach were followed by the WTO Appellate Body, then the distinction made by a carbon tax between high-carbon and low-carbon steel could be equally taken for granted so that it could at least be *presumed* that these different types of steel are not like (and a WTO member can, as a result, validly distinguish between them without violating its “national treatment” obligation).

⁷⁵ The carve out in GATT Article II:2(a) for “charges equivalent to an internal tax”, is only a carve out for the tariff discipline in GATT Article II; not for the national treatment discipline in GATT Article III, compliance with which is explicitly required in GATT Article II:2(a) itself.

⁷⁶ For tax measures both “like” products and products that are “directly competitive or substitutable” can be compared (*Ad Note* to GATT Article III:2, second sentence).

⁷⁷ Remember, in case no border adjustment would be permitted, then GATT Article III would not apply in the first place and, instead, a violation of GATT Article XI would be found.

⁷⁸ *Supra* note 49 at para. 5.2.4.

⁷⁹ *Ibid.*

On the other hand, a series of WTO disputes did revolve around perfectly “border adjustable” excise taxes on alcoholic beverages which were nonetheless found to be *de facto* discriminatory because the tax system taxed one type of alcoholic beverage (say, vodka) higher than another like (or directly competitive) alcoholic beverage that was predominantly domestically produced (say, shochu). If the WTO were to apply the test it thus adopted to determine likeness of products covered (or not covered) by a carbon tax or regulation, there is little doubt that, for example, steel made with coal and steel made with natural gas would, indeed, be found to be like. According to the WTO Appellate Body,

“a determination of ‘likeness’ ... is, fundamentally, a determination about the nature and extent of a competitive relationship between and amongst products”.⁸⁰

Now, as explained earlier in this paper, the very reason to introduce a competitiveness provision – that is, to apply a US carbon tax or regulation also to imports – is that otherwise imports (say, Chinese steel made with coal that was not subject to emission cuts) would gain an unfair competitive advantage as opposed to domestic products (say, more expensive US steel made with carbon limits in place and, as a result, produced, for example, with natural gas). In other words, if the United States argues that it needs adjustment at the border because of competitiveness concerns, it cannot turn around later under a “likeness” examination and say that high-carbon and low-carbon products do not compete in the first place.

That said, even if imports covered by US climate legislation (say, a limited list of carbon-intensive raw materials like steel and glass) and imports *not* so covered (say, less carbon-intensive raw materials or finished products like cars)⁸¹ -- or one type of product compared to

⁸⁰ Appellate Body Report on *EC –Asbestos*, *supra* note 73. For taxes, also “directly substitutable or competitive” products can be compared, see *supra* note 76. WTO jurisprudence has used the following four criteria to determine comparability: (1) physical characteristics of the products; (2) end-use; (3) consumer tastes and habits; (4) tariff classification (*ibid.*, para. 101). Under all of these criteria, different types of steel depending on the energy used to produce the steel are most likely to be found comparable (they are physically the same; used for the same end-use; and not normally classified differently for import tariff purposes). Only the third criterion of “consumer tastes and habits” could arguably make them different if one could demonstrate that US consumers really do make a difference between types of steel in their consumption patterns based on climate change concerns; however, if this were the case, then there would be no need for competitiveness provisions in the first place as consumers themselves would already turn to, and be willing to pay a premium for, low-carbon products without any need for the government to intervene.

⁸¹ One could imagine, for example, that to make any scheme of border adjustment manageable, it could be limited to a certain number of raw materials that are particularly energy intensive. One study, premised on a carbon tax of 32 Swiss Francs (26 US\$) per tonne of CO₂, concludes, for example, that “only a handful

another based on the energy with which it was produced -- were all found to be “like”, this does not by itself mean that the legislation discriminates *based on national origin*. As the Appellate Body found:

“even if two products are ‘like’, that does not mean that a measure [violates national treatment] ... a [WTO] Member may draw distinctions between products which have been found to be “like”, without, for this reason alone, according to the group of “like” imported products “less favourable treatment” than that accorded to the group of “like” domestic products”.⁸²

In other words, for a competitiveness provision in US climate legislation to be found to violate national treatment it must also be demonstrated that somehow the overall group of imported like products into the United States (e.g., all types of imported steel) is affected more heavily than the overall group of like domestic, US production (e.g., all types of US steel). This would require, for example, that US production is inherently or historically predominantly low-carbon; whereas imports are predominantly high-carbon. In a more recent case, the Appellate Body required even more before it could find a national treatment violation. In that case, it was willing to accept a “detrimental effect on a given imported product” for as long as it could be “explained by factors or circumstances unrelated to the foreign origin of the product”.⁸³ If that finding were applied in an examination of a carbon tax or regulation under GATT Article III, then the environmental reasons summarized earlier could be used to explain why the tax or regulation relates to environmental concerns of climate change, not to “the foreign origin of the product”. If that explanation were accepted, a violation of GATT Article III could be avoided, and there would be no need to go into the intricate requirements of the GATT Article XX justification (discussed in Section VI).

of carbon-intensive raw materials industries will see price increases ... that are large enough to pose a meaningful threat to competitiveness. [Import adjustments] on bulk transfer of ten to twenty basic materials – unfabricated metals, bulk glass and paper, fertilizer and a few chemicals – should suffice to offset nearly all discernible impacts” (see Hoerner and Muller, *supra* note 52 at 21).

⁸² *EC—Asbestos*, *supra* note 80, at para. 100 (italics in original, underlining added). In respect of a tax that differentiates between “directly competitive or substitutable products” (see *supra* note 76), it must be proven that the tax is “applied so as to afford protection to domestic production” (*Japan – Alcoholic Beverages*, WT/DS8/AB/R, 4 October 1996, at p. 27-31).

⁸³ Appellate Body Report, *Dominican Republic – Cigarettes*, para. 96, WT/DS302/AB/R (adopted May 19, 2005). See also Panel Report, *EC – Biotech Products*, para. 7.2514, WT/DS291/R (adopted Nov. 21, 2006).

Finally, if US climate legislation were to apply to imports, how could US customs figure out the carbon content of specific imports without discriminating against those imports? The carbon is not physically in the steel or cement; hence, one would have to rely on supporting documents provided by the foreign manufacturer. What happens if such voluntary reporting is not complied with? An alternative basis for calculation of the carbon tax (or amount of emission credits to be provided) could then be the amount of carbon that would have been emitted had the imported product been produced in the United States using the US *predominant method of production*.⁸⁴ This is exactly the system that was adopted in the *Superfund* legislation for the tax on imports produced with certain chemicals. The GATT panel in this dispute did not find fault with this mechanism.⁸⁵ The WTO Appellate Body Report in *US – Gasoline* did, however, find that if domestic gasoline refiners get an individual baseline -- representing the quality of gasoline produced by that refiner -- as a starting point for cleaner standards on gasoline, then not to give the same opportunity to importers (which, instead, had to follow a statutory baseline) is discriminatory.⁸⁶ The Appellate Body rejected US arguments that verification on foreign soil and enforcement problems related to tracking the exact refinery or origin of specific gasoline made individual baselines, based on information provided by the foreign refiners themselves, an unrealistic option (especially not if compared to similar problems faced in respect of domestic gasoline). Yet, the Appellate Body did agree that statutory baselines – or, in our case, the fallback of the US *predominant method of production* – could be used “when the source of imported gasoline could not be determined or a baseline could not be established because of an absence of data”.⁸⁷

An alternative method of calculation that has been suggested, largely to avoid any semblance of discrimination, is to calculate a carbon tax or emission allowance requirement on imports based on the carbon emitted using the *best available technology*.⁸⁸ This would mean that, for example, Chinese steel made with coal would only have to pay the price of carbon emitted for the same steel produced in the United States with the least polluting technology, say, natural gas. This would, of course, seriously reduce the amount of adjustment that can be imposed on imports and may not be sufficient to address competitiveness concerns. Yet, it would

⁸⁴ In support, see Hoerner and Muller, *supra* note 52 at 35-6.

⁸⁵ The same mechanism – voluntary reporting and backup imputation based on the US predominant method of production – was adopted also in the US ozone-depleting chemicals tax as well as the proposed BTU tax legislation of 1993. See *supra* note 50.

⁸⁶ Appellate Body Report on *US – Gasoline*, WT/DS2/AB/R, 20 May 1996.

⁸⁷ *Ibid.*, p. 27.

⁸⁸ See Ismer and Neuhoff, *supra* note 4 at 15.

avoid claims of discrimination as all “like” products – for example, all steel – would then be taxed the same.

D. Most-favored-nation treatment: no discrimination between like products from different countries

US climate legislation must not only avoid discrimination of imports *versus* US products (“national treatment” under GATT Article III); it must also avoid discrimination between imports from different countries. That is the requirement under the so-called “most-favored-nation” obligation of GATT Article I. This provision requires, more specifically, that

“any advantage ... granted by any Member to any product originating in ... any other country shall be accorded immediately and unconditionally to the like product originating in ... all other [WTO] Members”.

In this respect, at least two problems may arise. First, the United States may decide to apply a carbon tax or regulation only on imports from countries that do not have emission cuts in place. In that event, the United States would be granting an “advantage” to, for example, European imports (which are subject to emission cuts in Europe) which it does not “immediately and unconditionally” accord to, for example, China, Brazil or India (which do not have emission cuts in place). The question remains, however, whether European steel produced subject to an emission tax (or emission allowances) is “like” Chinese steel produced *without* such domestic restrictions. As explained earlier, WTO jurisprudence has interpreted “likeness” as a question of competitiveness so that the two types of steel are most likely to be found “alike”.⁸⁹ Moreover, the distinction thus made between types of steel that are “like” can be said to be based on national origin: Chinese steel pays the tax; not European steel.⁹⁰ Hence, in all likelihood, U.S. climate legislation that excludes from its scope imports from countries that have emission cuts in place would violate GATT Article I.⁹¹ Crucially, however, this violation can still be justified under the environmental exception in GATT Article XX as explained in Section VI.

⁸⁹ See *supra* note 80.

⁹⁰ *But* see recent cases referred to *supra* notes 82 and 83 which, if applied to GATT Article I, might require additional evidence that the distinction was really made based on national origin rather than environmental concerns.

⁹¹ A similar violation of GATT Article I (MFN) would be found in case a US competitiveness provision would exclude, or apply differently to, developing countries depending on their stage of economic

A second question that may arise is what would happen if U.S. climate legislation applies to all imports across the board, including imports from countries that have their own emission cuts in place. One could imagine that, for example, Europe would then challenge such legislation, arguing that its producers must, thereby, pay the price of carbon twice: once under domestic EU legislation; and a second time at U.S. customs. From that perspective, Chinese imports, for example, are granted an “advantage” (i.e., only taxed once) not accorded to European imports. One possible response, at least when the U.S. legislation takes the form of a carbon tax on imports, is that Europe can avoid this “double taxation” by rebating any tax or costs borne by European products upon exportation. That is, after all, the other side of border tax adjustment: European goods get a rebate upon exportation but, according to the destination principle, pay the U.S. carbon tax when imported into the United States. Thus, if European exports get taxed twice it is not because the U.S. imposes an import tax, but because the EU failed to rebate exports.⁹²

In sum, for a U.S. competitiveness provision to target only countries with no emission cuts in place would most likely violate MFN (the United States would then be treating “like” products differently based on their origin); for a competitiveness provision to apply to all countries – including those that have their own emission cuts in place such as Europe -- is less likely to raise an MFN problem (the United States can then be said to be treating all “like” products in the same way).

VI. Environmental exceptions in GATT Article XX

As indicated in the introduction to this paper, and hinted at throughout the analysis of the substantive rules of the WTO, any violation of the GATT may still be justified under the environmental exceptions of GATT Article XX as a measure:

development. Yet, as discussed below in Section VI, this differentiation could be justified (or even required) under GATT Article XX (and/or the *Enabling Clause*, see *supra* note 120).

⁹² If US border adjustment takes the form of a regulation, “rebating” a regulation upon export is not an option (under the *Agreement on Subsidies and Countervailing Measures* it could even be regarded as a prohibited export subsidy, see *supra* text at note 70). In that case, the argument that European imports are discriminated against (because they are covered by a US carbon regulation applied to imports as much as Chinese imports) becomes stronger. On this view, discrimination could then be argued to exist not only when like products are treated differently (say, Chinese steel is taxed; not European steel); but also when different products are treated alike (say, Chinese steel with no emission cuts in place is taxed as much as European steel with emissions cuts). Yet, for Europe to convince the WTO that products become different or “unlike” based on whether they were produced with or without emission cuts in place would be hard, given the WTO’s competitiveness test for likeness explained earlier (see *supra* note 80). Thus, even a carbon regulation that applies to all countries across the board would not likely violate MFN.

“relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption”.⁹³

In other words, a punitive tariff or quantitative restriction on carbon-intensive imports (discussed in Section IV.A above) might still be justified under GATT Article XX. Equally, even if the WTO would *not* accept that a domestic, U.S. carbon tax, cap-and-trade system or other carbon regulation (such as a maximum carbon intensity standard or carbon label) is subject to “border adjustment” (as discussed in Section V.A and B above), a U.S. carbon tax or emission credit requirement or other regulation on imports can still be justified under GATT Article XX. Finally, even if U.S. climate legislation were found to be discriminatory (for example, because it favors U.S. steel over Chinese steel; or only imposes duties or an emission credits requirement on steel from countries that do not have emission cuts in place), GATT Article XX might justify such discrimination.⁹⁴

Whereas pre-1995 GATT panels never found that a measure met the exceptions in GATT Article XX⁹⁵; post-1995 WTO jurisprudence has proven to be much more flexible and “greener”. In 2001, the WTO Appellate Body accepted a French ban on imports of asbestos as qualifying under the exception of GATT Article XX(b) for health protection⁹⁶; later that year, it also found that a modified US ban on shrimp based on how these shrimp were caught *abroad* – that is, a pure

⁹³ GATT Article XX(g). Alternatively, climate legislation might also be justified as a measure under GATT Article XX(b), namely: “necessary to protect human, animal or plant life or health”. Yet, since the qualifier “necessary” (in Article XX(b)) is generally perceived as more difficult to meet than that of “relating to” (in Article XX(g)) this paper focuses on Article XX(g).

⁹⁴ Violations of the Anti-Dumping and Subsidies Agreements are not generally understood to be justifiable under GATT Article XX. Hence, in the case of a carbon “tariff” (rather than a carbon tax or regulation), it is better to call it just that so that it becomes a tariff in violation of GATT Article II that might be justified under GATT Article XX; rather than a violation of the Anti-Dumping or Subsidies Agreement that cannot be justified under the environmental exceptions of GATT Article XX.

⁹⁵ The first *Tuna – Dolphin* panel (*supra* note 65) found that the United States ban on tuna to protect dolphin abroad was not justified under GATT Article XX(b) as, according to the panel, this provision is “focused on the use of ... measures to safeguard ... animals or plants within the jurisdiction of the importing country” (para. 5.26). In addition, the panel found that if the United States were permitted to ban imports based on unilaterally determined US standards on dolphin protection, then the GATT “would provide legal security only in respect of trade between a limited number of contracting parties with identical internal regulations” (para. 5.27). Note that, for present purposes, a carbon tax or regulation would not impose a full ban, but rather an extra tax or charge.

⁹⁶ See *supra* note 80.

process measure, similar to a carbon tax or regulation – was justified under GATT Article XX(g) as a conservation measure for endangered turtles.⁹⁷

A. The conditions under paragraph (g) of GATT Article XX

For a carbon tax or regulation on imports to meet the GATT Article XX(g) exception, three cumulative conditions must be met:

- *Is the planet's atmosphere an "exhaustible natural resource"?:* In previous cases, stocks of fish that were not even endangered (herring, salmon and dolphin), clean air and endangered sea turtles were found to be "exhaustible natural resources".⁹⁸ Considering the international importance given today to the problem of climate change⁹⁹ – and the catastrophic consequences that are linked to it for all forms of life on earth -- it would be surprising if the WTO would not accept that the planet's atmosphere (that is, the layer of gases around the earth that regulates the planet's climate) is an "exhaustible natural resource". The fact that a carbon tax or regulation on imports would address carbon emitted *abroad* should not impose a jurisdictional ban on US regulation. What is required is "a sufficient nexus"¹⁰⁰ between carbon emissions in, for example, China and the climate change consequences that such carbon emissions can have for the United States. In *US – Shrimp*, the United States was permitted to protect turtle in India based on the fact that (1) the turtle are an endangered species; and (2) the turtle are highly migratory animals which are known to occur in U.S. waters. If the United States was permitted to protect turtle in India that may at some point cross U.S. waters, it is hard to imagine why it would not be permitted to protect against carbon emitted in India that certainly crosses territorial borders and is known by science to be as dangerous for climate change as carbon emitted within the United States itself. The world's atmosphere is, after all, a global commons; and carbon emissions are, because of their global impact, a collective action problem.¹⁰¹

⁹⁷ Appellate Body Report on *US – Shrimp (Implementation under Article 21.5)*, WT/DS58/RW/AB, 21 November 2001.

⁹⁸ Appellate Body report on *US – Shrimp*, WT/DS58/AB/R, paras. 127-134.

⁹⁹ In its assessment of what constitutes "exhaustible natural resources", the Appellate Body has, indeed, referred to the "contemporary concerns of the community of nations about the protection and the conservation of the environment" as well as the preamble to the *WTO Agreement* which refers to "the objective of sustainable development" (*ibid.*, para. 129).

¹⁰⁰ *Ibid.*, para. 133.

¹⁰¹ See *supra* Stern Review note 2.

- *Does U.S. climate legislation “relate to the conservation of” the planet’s atmosphere?:* Importantly, what needs to be examined under this test is not the actual trade restriction or discrimination found earlier under other GATT provisions, but rather the U.S. legislation *as a whole*.¹⁰² The “related to” test requires that there be a “substantial relationship” between U.S. climate legislation and the conservation of the planet’s atmosphere and related climate. This relationship must be “a close and genuine relationship of ends and means”.¹⁰³ For example, the legislation must not be “disproportionately wide in its scope and reach in relation to the policy objective of protection and conservation” of the planet’s climate.¹⁰⁴ This test must be applied to the legislation as such and its general design; not so much to its specific details. As a result, in both WTO cases where the test was applied (*US – Gasoline* and *US – Shrimp*) it was easily met. Unless there are blatant inconsistencies or protectionist features in the U.S. legislation, climate change legislation should normally pass this “related to” test. For environmental reasons in support of a competitiveness provision, see Section II.A above.
- *Is U.S. climate legislation on imports “made effective in conjunction with restrictions on domestic production and consumption?:* As long as U.S. legislation imposes broadly similar restrictions also on domestic, U.S. businesses, this clause will be met. In *US – Gasoline*, the Appellate Body confirmed that this is only a “requirement of *even-handedness* in the imposition of restrictions ... [there is] no textual basis for requiring identical treatment of domestic and imported products”.¹⁰⁵ More specifically, even if the legislation in some of its details were to discriminate imports as opposed to domestic products, the legislation or measure as a whole can still be found to meet this test (as was the case in *US – Gasoline*).¹⁰⁶ This third test under GATT Article XX(g) should therefore be easy to meet.

¹⁰² *US – Gasoline*, *supra* note 86 at p. 16.

¹⁰³ *US – Shrimp*, *supra* note 98 at para. 136.

¹⁰⁴ *Ibid.*, at para. 141. This reference to “scope and reach” may justify a possible limitation of a carbon tax or other regulation on imports that is limited to a certain class of energy-intensive raw materials (as suggested *supra* note 81) even if such limited list might otherwise violate national treatment or MFN.

¹⁰⁵ *US – Gasoline*, *supra* note 86 at p. 21.

¹⁰⁶ As the Appellate Body in *US – Gasoline* (*supra* note 86, at p. 21) explains, if the exception in GATT Article XX(g) required “identity of treatment ... it is difficult to see how inconsistency with Article III:4 [i.e. a national treatment violation] would have arisen in the first place”.

B. The conditions under the introductory phrase of GATT Article XX

Finally, even if all three conditions under the specific paragraph of GATT Article XX(g) were met, U.S. climate legislation that was found to violate any other GATT provision would also have to fulfil the introductory phrase of GATT Article XX. This phrase requires that

“measures are 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”.¹⁰⁷

In all cases where the Appellate Body found that the GATT Article XX exception was *not* met, it did so under this introductory phrase. For present purposes as well, this phrase may well be the most important provision in the entire GATT agreement. The introductory phrase of GATT Article XX is not about the climate legislation as such, but about its “detailed operating provisions” and how it is “actually applied”.¹⁰⁸ As importantly, under this phrase, according to the Appellate Body in *US – Shrimp*, the environmental policy goal no longer matters; the legitimacy of the policy goal and how the legislation relates to it must be examined under paragraph, not the introductory phrase.¹⁰⁹ Finally, the discrimination to be avoided under the introductory phrase of Article XX (“arbitrary or unjustifiable discrimination between countries where the same conditions prevail”) is different from the discrimination referred to earlier under national treatment (GATT Article III) and MFN (GATT Article I). Under Articles I and III, the discrimination is focused on “like products”; under Article XX it is focused on “countries where the same conditions prevail”. Moreover, and quite logically, the discrimination under the exception in Article XX must be different in “nature and quality”¹¹⁰ or “go beyond”¹¹¹ the discrimination under the rule in Article I or III. Indeed, if the discrimination in Article XX were the same as that in, say, Article I on MFN, then as soon as one finds MFN discrimination, one

¹⁰⁷ Article 3.5 of the *UN Framework Convention on Climate Change* provides similarly that “[m]easures taken to combat climate change, including unilateral ones, should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade”.

¹⁰⁸ *US – Shrimp*, *supra* note 98 at para. 160.

¹⁰⁹ *Ibid.*, para. 149.

¹¹⁰ *US – Shrimp*, *supra* note 98 at para. 150.

¹¹¹ *US – Gasoline*, *supra* note 86, at p. 28.

would not, by definition, be able to justify it under Article XX.¹¹² At the same time, discrimination under the introductory phrase of Article XX covers both discrimination between different foreign countries exporting to the United States (MFN-type discrimination as was found to be the case in *US - Shrimp*) and discrimination between foreign countries and the United States (national treatment-type discrimination as was found to be the case in *US - Gasoline*).

With this general background in mind, when examining whether a U.S. competitiveness provision amounts to “arbitrary or unjustifiable discrimination between countries where the same conditions prevail”, the Appellate Body, based on its decisions in previous environmental disputes, is likely to refer to at least the following three elements:

- *Does U.S. climate legislation take account of local conditions in foreign countries or does it essentially require that foreign countries adopt U.S. policies?* In *US – Shrimp*, the original US ban was faulted because of its “intended and actual coercive effect on the specific policy decisions made by foreign governments”; more specifically, it required that all other countries “adopt essentially the same policy” as the United States does; “[o]ther specific policies and measures that an exporting country may have adopted for the protection and conservation of sea turtles are not taken into account”.¹¹³ When, in response, the United States no longer required the “adoption of essentially the same program” but conditioned market access for imported shrimp on “the adoption of a program *comparable in effectiveness*” to that of the U.S. program, the Appellate Body found that such “allows for sufficient flexibility in the application of the measure so as to avoid ‘arbitrary or unjustifiable discrimination’”.¹¹⁴ This would seem to require that any carbon tax or regulation on imports is sufficiently flexible and takes “into consideration different conditions which may occur” in different foreign countries. This requirement has two important consequences for any US competitiveness provision:

Firstly, it may force the United States to consider whether a foreign country already imposes emission cuts or otherwise addresses climate change. This, in turn, may oblige (or at least enable) the United States to impose lower (or no) import taxes or emission allowance

¹¹² If not, “[t]o proceed down that path would be both to empty the [introductory phrase] of its contents and to deprive the exceptions ... of meaning” (*ibid.*, at p. 23).

¹¹³ *US – Shrimp*, *supra* note 98 at para. 161 and para. 163.

¹¹⁴ *US – Shrimp (Implementation under Article 21.5)*, *supra* note 97, at para. 144.

requirements on imports from countries that have their own climate policies in place.¹¹⁵ In other words, even if excluding European countries would violate MFN (as suggested earlier) such violation would seem to be justified under the introductory phrase of GATT Article XX. Note, however, that the same reasoning would then apply to, for example, Chinese efforts to combat climate change (China has, for example, introduced a domestic target to improve energy intensity by 20 per cent by 2010 and imposed an export tax of 5 to 15 per cent on energy-intensive exports such as iron and steel, cement, aluminum and certain chemicals).¹¹⁶

Secondly, the requirement to take “into consideration different conditions which may occur”¹¹⁷ in different foreign countries, may force the United States to consider whether developing countries should, for historical reasons, carry the same burden as other countries. Under the *UN Framework Convention on Climate Change* (ratified by the United States), for example, protection of the climate system must be pursued “on the basis of equity and in accordance with [the parties’] common but differentiated responsibilities and respective capabilities”.¹¹⁸ This, in turn, may oblige (or at least enable) the United States to impose a graduated import tax or regulation depending on the stage of economic development of the foreign country in question.¹¹⁹ In other words, the introductory phrase of Article XX may force

¹¹⁵ The Kyoto Protocol, for example, leaves it open as to how countries meet their targets, be it through taxes, regulations or a cap-and-trade system.

¹¹⁶ See follow-up to the *Stern Review*, *supra* note 8 at 20 (“This compares well to the cost imposed by the EU ETS [emissions-trading scheme] on firms in these sectors. At allowance prices of €20/t CO₂, the impact is estimated at 1% for integrated steel and 4% for aluminum, based on the increase in electricity prices. Current prices for EU ETS allowances are €2 to €5 euros, implying far smaller impacts”). India as well has made “changes to energy subsidies, plans for more efficient coal-fired power plant[s] and further development of innovative new technologies for renewable energy” (*ibid.*, at 4).

¹¹⁷ *Supra* note 113.

¹¹⁸ See also Article 3.4 of the *UN Framework Convention on Climate Change*: “Policies and measures to protect the climate system against human-induced change should be appropriate for the specific conditions of each Party and should be integrated with national development programmes, taking into account that economic development is essential for adopting measures to address climate change”.

¹¹⁹ Recall that under the Kyoto Protocol, developing countries did not have to commit to any emission reductions. Yet, since the United States did not ratify the Kyoto Protocol it cannot be held by this concession that developing countries should not cut emissions at all (but see the *UN Framework Convention on Climate Change*, *supra* note 118 which the United States did ratify). If the EU were to impose a carbon tax on imports, however, the fact that it ratified the Kyoto Protocol could force the EU to exclude those developing countries from its carbon tax. That the WTO may, and should, in certain cases refer to other treaties, such as the Kyoto Protocol, as long as both disputing parties are bound by such other treaty, see Joost Pauwelyn, *How to Win a WTO dispute based on non-WTO law: Questions of Jurisdiction and Merits*, *JOURNAL OF WORLD TRADE* (2003) 997.

the United States to have lower or even no carbon restrictions on imports from developing countries, especially the very poor ones.¹²⁰

In contrast, if U.S. climate legislation would be found to comply with GATT rules and there would, therefore, be no need to revert to the environmental exception in GATT Article XX, such graduation or even exclusion of (i) countries with their own climate policies in place, and (ii) developing countries, could be avoided. That largely explains why it is, after all, useful to try to justify future US climate legislation as it applies to imports as, for example, “border tax adjustment” rather than justify the measure directly under the exceptions in GATT Article XX.

- *Before imposing the “unilateral” carbon tax or regulation on imports, did the United States engage in “serious, across-the-board negotiations with the objective of concluding bilateral or multilateral agreements” to address climate change?*¹²¹ This does not require the actual conclusion of agreements with, say, China, Brazil or India¹²², but at the very least good faith efforts by the United States to bring these countries into the fold of an international effort to combat climate change before making a move to the second or third best option of unilateral border adjustments. Such negotiations must also occur on a non-discriminatory basis with all countries affected.¹²³ Note, however, that unlike the absolute ban in *US – Shrimp*, a carbon tax or regulation on imports would not ban imports, but only make them pay the social cost of carbon. In that sense, the unilateral action would be less trade restrictive than in *US - Shrimp*.
- *Does the implementation and administration of US climate legislation respect “basic fairness and due process”?*¹²⁴ If there would, for example, be certification or rebates for

¹²⁰ Imposing a more lenient carbon tariff or tax on developing countries, especially the poorest ones, could not only be justified because “the same conditions” do not prevail in those countries (under GATT Article XX); but also with reference to the 1979 *Enabling Clause* which permits developed countries to give tariff preferences to developing countries that they do not need to extend to developed nations. See *supra* note 24 for how Europe gives tariff preferences to developing countries who have signed the Kyoto Protocol. Making a distinction between developing countries based on whether they have ratified Kyoto or have other climate change policies in place, could then be justified with reference to the “development, financial and trade needs of developing countries” as permitted by the Appellate Body Report in *EC – Tariff Preferences*, WT/DS256/AB/R, 20 April 2004.

¹²¹ *US – Shrimp*, *supra* note 98 at para. 166.

¹²² *US – Shrimp (Implementation under Article 21.5)*, *supra* note 97 at para. 124.

¹²³ *US – Shrimp*, *supra* note 98 at paras. 169-172 (where the United States was found to have discriminated in favor of five countries by concluding the Inter-American Convention for the protection and conservation of sea turtles, without negotiating with other countries).

¹²⁴ *Ibid.*, para. 181.

domestic efforts to fight climate change or developing countries, is the process transparent and predictable; are parties heard and is the system non-discriminatory in its procedures?

VII. Conclusion

Concerns for U.S. economic competitiveness are a core explanation for why there is, to date, no US federal climate legislation (Section I). This paper examined the advantages and disadvantages of including a competitiveness provision in future U.S. climate policy (Section II). Although such competitiveness provision could take different forms, one of the options is to enlist trade policy in the fight against global warming (Section III). Most controversial by far would be the imposition of trade restrictions on imports based on the carbon or other greenhouse gases that were emitted in their production *abroad* (so-called trade restrictions in respect of “foreign-emitted” or “offshore” carbon). Although there are certain options to be avoided as they would violate WTO law (e.g. anti-dumping and anti-subsidy duties, discussed in Section V), the broader WTO consistency of such process-based restrictions is unclear and remains to be tested (Sections V and VI).

Notwithstanding these uncertainties, this section concludes with a specific proposal for a competitiveness provision in line with the guidelines developed throughout this paper, and lists the questions that such provision would raise under WTO law.

With the enactment of internal, US limits on greenhouse gas emissions -- be it through a tax or cap-and-trade system -- goods imported into the United States pay a “carbon tax” at the border.

- A. A first line of defense is that such carbon tax amounts to “**border tax adjustment**” explicitly permitted under WTO rules for product-related or indirect taxes (such as VAT or sales taxes). The carbon tax is then simply the extension to imported products of the tax or cost of holding emission allowances imposed on domestic, U.S. producers.
- Product scope: to limit the impact on trade, only a limited list of imports of energy-intensive raw materials should be covered; studies indicate that only for these products serious competitiveness concerns arise; the administration of a carbon tax on imports, and the problem of determining the carbon footprint of goods produced abroad, would also be

- much easier if it applies only to some basic products (such as iron and steel, aluminum, cement, bulk glass, paper and a number of chemicals) and *not* to finished goods (such as cars, consumer goods and durables or drugs).
- Level of the carbon tax on imports: The carbon tax on imports must be “equivalent” to the internal cost imposed by US climate legislation on US products. This cost can be calculated in a specific dollar amount per tonne of carbon emitted in the production of a certain imported product.
 - Calculation of the carbon footprint of imports: Importers are required to submit information on the amount of carbon emitted in the production of the product abroad; such information is to be certified by the foreign manufacturer; in case no such information is provided, US customs can use the amount of carbon that would have been emitted when producing the product using the *predominant method of production* in the United States.
 - Price per tonne of carbon: Once the number of tonnes of carbon emitted in the production of the import has been determined, US customs would need to multiple that amount by a certain price per tonne of carbon. If US climate legislation as it applies to US producers takes the form of a tax per tonne of carbon emitted, the price to be used is the amount of that tax. If US climate legislation as it applies to US producers takes the form of a cap-and-trade system, the price per tonne would be the market price at which an emission credit for one tonne of carbon was recently sold. This market price could be the average of the last 6 months or any other average that is as trade neutral as possible.
 - Complication in the event of free allocation of emission allowances: In case emission credits are handed out for free to US companies (for example, up to their current levels of emissions), the tax on imports at the border may have to be proportionally reduced. Free allocation of emission credits may also raise the claim that it amounts to a subsidy to US companies in violation of WTO rules (although free allocation has been, and remains, the rule in the European climate scheme).
 - The carbon tax could apply to all imports: If the WTO accepts the idea of adjusting an internal US carbon tax or cap-and-trade system to imports at the border under GATT rules on “border tax adjustment”, then this tax can be applied to all imports, even imports from countries that have their own emission cuts in place and developing countries. Upon exportation of such products, the country of origin can then simply “rebate” the tax that was paid there. Under GATT rules on “border tax adjustment” the purpose of the tax (in our case, combating climate change) was found to be irrelevant. Like an excise tax on

imported cigarettes or a VAT (or sales) tax on imported clothes, no matter what the origin of the cigarettes or the clothes, the same tax is due. Not having to make any tax distinctions based on the origin of the import would obviously make administering the tax much easier. That is the crucial advantage of justifying the tax under “border tax adjustment” rules instead of the environmental exceptions in GATT Article XX.

B. A second line of defense is that the carbon tax is justified under the **environmental exceptions of GATT Article XX**. This second line of defense is needed in case (i) the WTO would not permit “border tax adjustment” for a process-based tax or charge such as an internal, US carbon tax or cap-and-trade system or (ii) the WTO does permit “border tax adjustment” but the adjustment is found to discriminate imports as against US products or between different sources of imports (in case, for example, the US would not impose the tax on countries, such as Europe, with their own emission cuts in place, or exclude very poor developing countries). In those cases a GATT violation would arise and would need to be justified under the exceptions of GATT Article XX. Under that provision the most crucial requirement is likely to be the introductory phrase of GATT Article XX. It requires essentially that the carbon tax on imports is flexible and varies in a way that takes account of local conditions in foreign countries exporting to the United States (if not, the tax could be found to amount to “arbitrary or unjustifiable discrimination between countries where the same conditions prevail”). In case a carbon tax would need justification under GATT Article XX, two adjustments in particular would need to be made:

- A sliding scale based on efforts to fight climate change in the exporting country: if the exporting country has its own carbon tax or cap-and-trade system in place, the cost thus imposed on production abroad (to the extent it was not rebated upon exportation) should be deducted from the US carbon tax on imports; similarly, any export tax on the exportation of carbon-intensive products (as China is reported doing) must be deducted from the US tax on imports; to calculate the cost of carbon abroad under the climate legislation of a foreign country, similar rules as those developed above could be used (determine the carbon footprint; multiply it by the going price of carbon in the foreign country).
- A sliding scale based on the stage of economic development of the exporting country: given that many international agreements (including the *UN Framework Convention on Climate Change* which the United States ratified) recognize that developing countries

ought to carry a lighter burden in the fight against global warming, a US carbon tax on imports should reduce the carbon tax in case imports come from developing countries; not to do so risks to amount to discrimination (in the form of unjustifiably treating *different* countries in the *same* way). Not all developing countries should receive the same reduction on the US carbon tax. A sliding scale could be imposed based on a number of indicators such as GDP per capita, recent economic growth, share of worldwide carbon emissions, etc.