Journal of WORLD TRADE

Wolters Kluwer
Law & Business

Published by:
Kluwer Law International
PO Box 316
2400 AH Alphen aan den Rijn
The Netherlands
Website: www.kluwerlaw.com

Sold and distributed in North, Central and South America by:
Aspen Publishers, Inc.
7201 McKinney Circle
Frederick, MD 21704
United States of America
Email: customer.service@aspenpublishers.com

Sold and distributed in all other countries by:
Turpin Distribution Services Ltd.
Stratton Business Park
Pegasus Drive, Biggleswade
Bedfordshire SG18 8TQ
United Kingdom
Email: kluwerlaw@turpin-distribution.com

Journal of World Trade is published six times per year.

Print subscription prices, including postage (2011): EUR 912/USD 1216/GBP 670.
Online subscription prices (2011): EUR 844/USD 1126/GBP 621 (covers two concurrent users).

Journal of World Trade is indexed/abstracted in the *European Legal Journals Index*.

Printed on acid-free paper.

ISSN 1011-6702

Printed in Great Britain.

All correspondence should be addressed to the Editor
under reference of:
Journal of World Trade
Email: edwin.vermulst@vvg-law.com

ISSN 1011-6702
Mode of citation: 45:4 J.W.T.

Climate Change and the WTO: Cap and Trade versus Carbon Tax?*

Warren H. Maruyama**

In the rush to enact cap and trade, major World Trade Organization (WTO) concerns have been overlooked. These problems are not necessarily fatal, but fixing them would have political costs. Free emissions allowance rebates to trade-intensive industries represent a WTO-illegal export subsidy, which may make a US cap-and-trade system unworkable for export-dependent economies like Japan, Germany, and China. The best interim solution would be a carbon or energy tax that is imposed on imports and rebated on exports to ensure a level playing field. Such a system could be implemented under the WTO's existing border tax adjustment rules even in the absence of a multilateral climate agreement.

Despite high initial hopes, prospects for a comprehensive global climate change regime are in disarray. In the US, efforts by the White House to jam cap-and-trade legislation through the Congress using Democratic majorities in the House and Senate have collapsed. On the scientific front, declarations by scientific and environmental groups and the United Nations (UN) Intergovernmental Panel on Climate Change (IPCC)

* This paper is drawn from a study for the Center for Fair Trade and WTO Studies in Tokyo, Japan. The Center initiated the study in order to examine potential WTO-consistent options for Japanese climate change legislation on the premise that a fair and effective international legal framework could be established in which all major emitters would participate and ambitious targets agreed to. I would like to express my personal appreciation to Mr Takashi Iwamoto, who was then the Executive Director of the Center, and Professor Mitsuo Matsushita, former Member of the WTO's Appellate Body, who conceived, commissioned, and coordinated the project. I would also like to thank Evan Alexander, then Trade Counsel, House Ways and Means Committee; Professor Steve Charnovitz, George Washington University Law School; Mr Jake Colvin, Vice President, National Foreign Trade Council; Mr Aaron Cosbey, Vice President, International Institute for Sustainable Development; Ms Meera Fickling, Research Analyst, Peterson Institute for International Economics; Mr Gary Horlick, Law Office of Gary Horlick; Mr Dan Hunter, Associate General Counsel, Office of the US Trade Representative; Susan L. Karamanian, Associate Dean – Int'l Programs, George Washington University Law School; Mr Timothy Keeler, Mayer Brown & Platt (former Chief of Staff, Office of the US Trade Representative); Mr Kazumochi Kometani; Director, International Legal Counsel Office, Trade Policy Bureau, METI; Mr Junichiro Kuroda, Director, Industrial Research Department, JETRO; Ms Naoko Munakata, Director, Policy Planning, Trade Policy Bureau, METI; Ambassador Hugo Paemen, Hogan Lovells (Former Deputy Director-General DG-Trade, European Commission, and EU Ambassador to US); Mr David Ross, Trade Counsel, Senate Finance Committee; Mr Mark Sandstrom, Law Office of Mark R. Sandstrom; Mr Takaaki Sashida, Assistant Director, Trade Policy Bureau, METI; Professor Tom Schoenbaum, George Washington University Law School; Mr Andrew Shoyer, Partner, Sidley Austin LLP; Messrs Watanabe and Ota, Nagashima-Ono Law Firm; all of whom participated in a discussion group at George Washington University Law School on 26 Feb. 2010 and provided important comments that were incorporated in the final paper and in this article. Rosamond Xiang, Attorney-Advisor in the US Department of Housing and Urban Development, assisted with initial research into potentially WTO-inconsistent export subsidization. Finally, I would also like to thank my friend and former USTR colleague and office mate, Professor Richard Parker, of the University of Connecticut School of Law, who provided an invaluable sounding board. The views set out in this article and any mistakes are, of course, entirely my own.

** Partner, International Trade Group, Hogan Lovells LLP. Mr Maruyama served as the General Counsel of the Office of US Trade Representative (2007–2009); Associate Director and Deputy Associate Director, White House Office of Policy Development (1989–93); Associate General Counsel, Office of the US Trade Representative (1983–1989); and Attorney-Advisor, US International Trade Commission (1980–1983).

Maruyama, Warren H. 'Climate Change and the WTO: Cap and Trade versus Carbon Tax?'. *Journal of World Trade* 45, no. 4 (2011): 679–726.

of a definitive 'scientific consensus' on global warming have been undercut by news reports of multiple factual errors in the IPCC report and disclosure of the East Anglia e-mails between prominent climate scientists.[1] And internationally, the notion among some environmentalists that developing countries like China and India would sign on to rigorous post-Kyoto climate change disciplines for the greater good (and promises of generous aid from the developed world) proved illusory, leading to the collapse of Copenhagen summit and, with it, any prospects for swift agreement on a post-Kyoto accord in the United Nations Framework Convention on Climate Change (UNFCCC) process.[2]

Cap and trade was not the silver bullet for climate change that it was for acid rain – bridging divides and uniting free marketers, business, and environmentalists in common cause. Instead, climate is now mired in controversies over science; in concerns about cost and bureaucracy; and, most of all worries, about the impact of a comprehensive climate regime on the competitiveness of key US industries and jobs.

It is unclear where the climate debate goes next, although the defeat of cap and trade is certainly a ground for a fundamental rethinking. First, environmentalists clearly need to bolster their scientific case in the court of US public opinion. Second, the collapse of cap and trade made it clear that something as sweeping as a comprehensive climate change regime cannot pass the Congress without genuine dialogue between all stakeholders and bipartisan support from both political parties.

Finally, a solution must be found to the biggest challenge to a comprehensive climate change regime, which remains the perception that it would undermine US industrial competitiveness and cost hundreds of thousands of jobs. Whatever the environmental benefits of higher energy prices and reduced greenhouse gas (GHG) emissions, such environmental gains would necessarily come with a cost in terms of reduced output and employment dislocation in traditional smokestack industries. Despite assurances by President Obama and climate advocates that any job losses from cap and trade would be swiftly offset by hundreds of thousands of new high-paying 'green jobs', labour unions, coal miners, blue-collar workers, and importantly US voters have hesitated to step into the abyss. This in turn has had broader political implications, since many Members of Congress, including Democrats who would have had to provide the bulk of the votes for climate change initiatives, have been reluctant to

[1] A Parliamentary inquiry concluded that the East Anglia e-mails did not undercut the basic scientific case for climate change. House of Commons Select Committee on Science and Technology, 'The disclosure of climate data from the Climatic Research Unit at the University of East Anglia', HC 387-I, Eighth Report of Session 2009–2010, vol. II (31 Mar. 2010). The errors in the IPCC Fourth Assessment Report apparently involved minor factual details and failures to verify information as opposed to undercutting the report's fundamental conclusions on global warming. Nevertheless, seeking to suppress dissenting scientific opinion or manipulate charts and data to bolster the case for climate change has undercut the credibility of climate science and raised questions as to what a 'scientific consensus' really means and why prominent scientists would engage in such behaviour.

[2] Given India's and China's clear-eyed negotiating postures in the Doha Round and other international trade negotiations, this was no surprise. The idea that they would sign on to equivalent greenhouse gas (GHG) reduction commitments after having been exempted from the Kyoto Protocol was probably naive.

undertake such sacrifices, particularly in times of tepid economic growth and rising political peril.[3]

To date, the major US cap-and-trade bills have sought to address industrial competitiveness concerns through a combination of free emissions allowances to trade-vulnerable industries and border carbon measures to limit imports of carbon-intensive products from developing countries like India and China. This approach poses obvious challenges for the global trading system and the World Trade Organization (WTO).

In the rush to pass a climate bill, the WTO problems arising from the import restrictions required to make a cap-and-trade system work appear to have been overlooked or unduly minimized. If something serious needs to be done about climate change, it makes far more sense from a trade policy and WTO standpoint to enact a straightforward carbon tax with border tax adjustments for imports and exports to ensure a level playing field. This would require confronting directly political concerns about higher taxation, but as the cap-and-trade fiasco showed, there is no way to bury this issue. What all of this means is that environmental advocates and WTO experts should start talking about how a harmonized tax (with border tax adjustments) or other alternatives might work, rather than betting the farm on reviving cap and trade.

In analysing the WTO implications of cap and trade, this paper focuses on H.R. 2454, the American Clean Energy and Security Act (also known hereinafter as 'Waxman-Markey') because its trade and competitiveness provisions are by far the most fully developed of the major US climate change bills and because it successfully navigated the political crucible of the US House of Representatives and survived (barely) a House vote. As a result, Waxman-Markey is the best leading indicator of what type of border carbon measures would be required to sustain political support for a comprehensive US climate change regime and thus the best test of whether such a regime could pass WTO scrutiny.[4]

The paper takes no position on whether cap and trade or a carbon tax would represent sound climate or tax policy. It focuses solely on whether cap and trade or a carbon tax could withstand a WTO challenge. Briefly summarized, the key conclusions are as follows:

(1) While Waxman-Markey's WTO problems are not necessarily fatal, the legal changes required to improve cap and trade's chances of surviving a WTO challenge would seriously injure its political prospects.

(2) Even if only a handful of energy- and trade-intensive US industries are vulnerable to increased import competition, there is intense political pressure to

[3] As the recent November 2010 election showed, these concerns were well-founded. Several Democrats who voted for climate change legislation lost their seats, particularly in Midwestern manufacturing and coal states.

[4] Indeed, the Job Protection and Growth provisions of the draft American Power Act, introduced by Senators Kerry and Lieberman on 13 May 2010, are virtually identical to the free emissions rebate allowances and border measures in Waxman-Markey.

maintain US industrial competitiveness and prevent job losses through some form of border measures against high-carbon imports from China, India, and other developing countries.

(3) From a WTO standpoint, the most straightforward solution to trade and competitiveness concerns would be a carbon or energy tax. Under the WTO's border tax adjustment rules, such a tax could be rebated on exports and imposed in an equivalent amount on like imports, ensuring a level playing field.

(4) Waxman-Markey's border carbon measures would not qualify as border tax adjustments under existing General Agreement on Tariffs and Trade (GATT) rules, because cap-and-trade is a regulatory scheme, not a 'tax'. Accordingly, absent a fundamental (and unrealistic) change in the current WTO/GATT border tax adjustment rules, cap and trade would not qualify for a border adjustment and thus would represent a prima facie violation of Articles II, III, XI, and XIII GATT.

(5) While Waxman-Markey's border measures could qualify for the Article XX(g) GATT exception for measures to conserve an exhaustible natural resource, such an approach involves serious legal uncertainties and would stretch the limits of the Appellate Body's still evolving Article XX environmental jurisprudence. Because a WTO dispute over climate change border measures would involve high stakes for the global trading system and pose major institutional challenges for the WTO, the Appellate Body, despite its previous sympathy for environmental trade restrictions, may require much stricter adherence to WTO requirements.

(6) Waxman-Markey' and Kerry-Boxer's grant of free emissions allowances to energy- and trade-intensive industries represents a WTO-illegal export subsidy under Article 3.1 of the WTO's Agreement on Subsidies and Countervailing Measures (hereinafter 'SCM Agreement'). While the WTO allows the US to shield import-sensitive industries from the effects of high-carbon imports by handing out free emissions allowances, the SCM Agreement significantly limits the ability of US policymakers to shield US *exports* from higher energy costs. As a result, cap and trade would put export-oriented US industries at a serious competitive disadvantage. This quirk in WTO rules may make a US-style cap and trade unworkable for highly export-oriented economies like Japan, Germany, and China.

(7) Article XX(g) GATT's requirement that any border measures should focus on GHG leakage limits its utility as a tool for protecting US jobs and competitiveness.

(8) The imposition of unilateral border carbon measures on India, China, and other developing countries is unlikely to enhance prospects for a UNFCCC/Copenhagen Accord agreement on global climate change and would invite costly retaliation by foreign governments against US exports.

(9) The ideal solution to climate change would be a fair and effective legal framework that binds all major emitters to ambitious targets for GHG reductions and defines the permissible scope of border carbon measures, as part of the UN's Copenhagen Accord UNFCCC process, but such an agreement is a long way off and prospects for success are unclear at best.

(10) A carbon tax would be a better interim approach pending an international climate change agreement, since unlike cap-and-trade-based import restrictions, it can be implemented under existing GATT/WTO rules without the need for a new multilateral consensus in the Copenhagen/UNFCCC process or WTO. Nevertheless, while a carbon tax would provide much more comprehensive and certain protection to US industries that either export or face competition from high-carbon imports, it still is far from an ideal solution.

1. Background

To date, US climate change legislation has centred on various cap-and-trade schemes to curb GHG emissions. On 26 June 2009, the US House of Representative approved H.R. 2454, the American Clean Energy and Security Act of 2009, also known as 'Waxman-Markey' after its lead sponsors, House Energy and Commerce Committee Chairman Henry Waxman (Democrat (D)-California) and Subcommittee Chairman Ed Markey (D-Massachusetts).

On 30 September 2009, Senator John Kerry (D-Massachusetts), Chairman of the Foreign Relations Committee, and Senator Barbara Boxer (D-California), Chairman of the Environment and Public Works Committee, introduced a Senate counterpart to Waxman-Markey – S. 1733, the Clean Energy Jobs and American Power Act of 2009 (hereinafter 'Kerry-Boxer'). Kerry-Boxer was approved by the Senate Environment and Public Works Committee on 5 November 2009 but then went nowhere. Efforts by Senators Kerry, Lieberman, and Graham to craft a bipartisan alternative eventually collapsed, although Senators Kerry and Lieberman eventually offered a draft alternative ('Kerry-Lieberman'). Finally, the Environmental Protection Agency (EPA) is moving ahead with a rule-making proceeding to impose limits on major GHG emitters, that is, power plants, under the Clean Air Act.[5]

Waxman-Markey, Kerry-Boxer, and Kerry-Lieberman all involve nationwide cap-and-trade regimes. Waxman-Markey and Kerry-Lieberman aim for a 17% reduction in GHG emissions by 2020. Kerry-Boxer mandates an even steeper 20% reduction.[6] To address competition from high-carbon imports from India, China, and other developing countries that are likely to be exempted from any emissions cuts, Waxman-Markey

[5] See, e.g., *Prevention of Significant Deterioration and Title v. Greenhouse Gas Tailoring Rule*, 75 *Federal Register* 31,513 (3 Jun. 2010).

[6] The draft Kerry-Lieberman bill scales back Kerry-Boxer's ambitious 20% reduction target to 17%, in part by delaying the application of GHG to industrial sources until 2016. Until that date, the GHG limits would apply only to large power plants. Title II of Kerry-Lieberman Draft (13 May 2010).

proposed a new 'International Reserve Allowances Program' (IRAP). IRAP would subsidize trade-vulnerable US industries, while imposing stiff border adjustments on high-carbon imports from India and China. While Kerry-Boxer did not include border measures in deference to the Senate Finance Committee's jurisdiction over trade, Kerry-Lieberman's border provisions closely mirror Waxman-Markey's IRAP.

1.1. Nationwide cap and emissions allowances requirement

Both H.R. 2454 and S. 1733 would impose nationwide caps on GHG emissions. Both would require 'covered entities' – electric power utilities and other major carbon emitters – to obtain allowances from EPA. The bills designate the following pollutants as GHGs: (1) carbon dioxide, (2) methane, (3) nitrous oxide, (4) sulphur hexafluoride, (5) hydro-fluorocarbons, (6) per-fluorocarbon, and (7) nitrogen tri-fluoride. The bills define 'covered entities' as any stationary source that produces or imports fuels that when combusted could emit more than the 25,000 MT CO_2-equivalent (CO_2e) per year; any stationary source that produces or imports more than 25,000 MT CO_2e per year; geologic sequestration sites; chemical and petrochemical producers; electricity producers; fuel producers and importers; industrial gas producers and importers; and certain industrial stationary sources from specific sectors[7] that exceed the 25,000 MT CO_2e threshold.

Under the House bill, the nationwide GHG cap would start at 97% of 2005 emission levels and be phased down through 2050, leading to a 17% reduction from 2005 emissions by 2020. To achieve such reductions, covered entities would be required to hold or purchase emissions allowances sufficient to cover their actual GHG emissions starting in 2012. Kerry-Boxer sets an even more ambitious 20% target for reductions in carbon emissions by 2020. Both bills impose penalties for non-compliance.

To promote an active nationwide carbon market, the climate bills would permit emissions allowances to be traded under an allowance tracking system administered by the EPA. Under the Emissions Trading System (ETS), a covered entity could purchase allowances from another entity that has unused allowances for sale or at an EPA auction. Such trading aims to promote broader economy-wide efficiencies and flexibilities, as covered entities reduce their emissions in order to realize the economic benefits of selling their allowances.

1.2. Free emissions allowances for trade-vulnerable industries

To address industrial competitiveness and trade adjustment concerns, Waxman-Markey, Kerry-Boxer, and Kerry-Lieberman would establish 'Emissions Allowance Rebate

[7] These include ethanol, ferroalloy, food processing, glass, iron and steel, lead, pulp and paper, and zinc production; natural gas distribution companies, and producers of algae based fuels. The Kerry-Lieberman bill defers the application of carbon emissions limits on industrial sources until 2016.

Programs' to distribute free allowances to trade-vulnerable industries.[8] Eligible sectors would receive free allowances to offset the higher costs of new emissions limits under cap and trade, starting in 2012. The bills require the EPA Administrator by 30 June 2011 to publish a list of industrial sectors that are eligible and the amount of free emissions allowances that will be granted per ton of production for each sector.[9,10]

Under the bills, a sector would be presumptively eligible for free rebates if it has (1) an 'energy or GHG intensity' of at least 5%, plus (2) a 'trade intensity' of at least 15%. Under this statutory formula, 'trade intensity' would be calculated by 'dividing the value of the total imports and exports of each sector by the value of the shipments plus the value of imports'.[11] Sectors that face high levels of import competition, or whose exports represent at least 15% of total shipments, would be eligible for free rebate allowances. The EPA Administrator would distribute the free rebates on an annual basis. Beginning in 2026, EPA would start phasing down the rebate allowances, from 90% of their original level, until they are completely phased out in 2035. This ten-year phase-out would be postponed for trade- and energy-intensive US industries facing competition from foreign producers not subject to comparable climate change emissions controls.

The EPA Administrator would determine a sector's eligibility based on data supplied by the US International Trade Commission (USITC). Industries could petition for a separate subsector to be designated as eligible for subsidies under a six-digit section of the North American Industry Classification System (NAICS) code, if it otherwise meets the energy- and trade-intensity criteria.[12]

1.3. Border adjustment measures

To address competitive imbalances arising from cap and trade, Waxman-Markey provides a further backstop in the form of a 'border adjustment' mechanism. This mechanism would require certain importers to purchase an 'international emissions allowance' to compensate for their higher GHG emissions. Absent presentation of an allowance to US Customs, the importer's products would not be permitted to enter the United States. These border carbon mechanisms[13] were drawn from a proposal originally drafted by Sidley Austin LLP for the International Brotherhood of Electrical Workers (IBEW) and

---

[8] A House Energy and Commerce Committee Fact Sheet explains: 'Pursuant to the Inslee-Doyle program, energy-intensive, trade-exposed industries that make products like iron, steel, cement, and paper will receive allowances to cover their increased costs.' American Energy and Security Act (H.R. 2454), Committee on Energy and Commerce (2 Jun. 2009).

[9] American Clean Energy and Security Act of 2009, H.R. 2454, Title IV, Subtitle A, s. 763(a)(1). A sector would also be deemed presumptively eligible if it has an energy or GHG intensity of at least 20%.

[10] Because the draft Kerry-Lieberman bill delays the application of GHG emission reductions to industrial sources until 2016, the date for implementation of free allowances for direct impacts on trade-exposed industries is also pushed back until 2016. Senators Kerry and Lieberman, *Summary of American Power Act* (13 May 2010), 3. However, industries would remain eligible for free allowances for indirect impacts arising from the higher cost of electricity costs effective in 2013. Sections 774(a)(2)(A) and 774(b)(3). In 2016, this eligibility would be expanded to cover disparities in leakage arising from an industry's direct carbon emissions.

[11] H.R. 2454, s. 763(b)(2)(iii).

[12] H.R. 2454, s. 763(b)(3)(B).

[13] The final border adjustment provisions were drafted by Chairman Sander Levin (D-MI), then Chairman of the House Ways and Means Trade Subcommittee.

American Electric Power (AEP)[14] and incorporated in the original Lieberman-Warner Climate Security Act of 2008.[15]

Section 765 of Waxman-Markey would make it the policy of the United States to work proactively under the UNFCCC to establish a binding agreement committing all major GHG-emitting nations to equitable and binding reductions in emissions, including 'agreed remedies for any party to the agreement that fails to meet its GHG reduction obligations in the agreement'.[16] There is broad agreement among almost all participants in the US climate debate that the ideal solution to the climate change dilemma would be a multilateral agreement in the UNFCCC process. However, to hedge US bets, the bill directs the President to notify each major foreign emitter that (1) while it is a US policy to support a binding multilateral UNFCCC climate change regime, (2) the United States nevertheless may apply the 'international reserve requirements' of the bill to future imports of covered goods in the absence of a multilateral agreement.[17] In other words, the notification puts foreign countries on notice that the US reserves the right to implement unilateral border measures if the Copenhagen Accord talks fail to produce an acceptable agreement.

If a UNFCCC climate change agreement has not entered into force by 1 January 2018,[18] the President must implement a US IRAP.[19] While the House bill allows the President to seek to waive border measures for a particular industry by certifying that it would not be in the national economic or environmental interest of the United States, the international reserve allowance requirement would still take effect *unless* Congress enacts a joint resolution approving the President's certification. The bill establishes a fast-track procedure for consideration of a Congressional joint resolution.[20] Since any such certifications would almost always be opposed by the US industry involved, the chances of approval of such waivers by both houses of Congress appear limited.

As part of IRAP, the President is required to determine in 2018, and every four years thereafter, whether more than 85% of imported goods for each eligible industrial sector are being produced or manufactured in countries that (1) are parties to the

---

[14] Sidley Austin LLP, 'WTO Background Analysis of International Provisions of U.S. Climate Change Legislation' (28 Feb. 2008).

[15] While Lieberman-Warner (s. 2191) also adopted an International Reserve Allowance Program, it took a somewhat more flexible approach. Under s. 2191, the programme was limited to 'primary products,' unlike Waxman-Markey, which is broader and also covers downstream products. Section 6001((5)(A). Like the House bill, Lieberman-Warner would have excluded least developed countries and those with *de minimis* emissions. Section 6006 (b)(2) and (c)(4). However, s. 2191 also provided the President with somewhat greater flexibility to exempt countries that took 'comparable action' to reduce emissions. Finally, it permitted the President to adjust the level of international allowances required based on a country's level of economic development and gave the President authority to make additional adjustments to ensure consistency with international agreements. Section 6006(d)(2)(B)(ii) and (g). These flexibilities were stripped from Waxman-Markey to accommodate concerns of import-sensitive US industries and labour unions.

[16] H.R. 2454, s. 766(a)(3).

[17] H.R. 2454, s. 765(c)

[18] This provision would operate as a gatekeeper, i.e., if a multilateral climate change agreement can be reached by 2018, US border measures would not enter into effect.

[19] Kerry-Lieberman pushes the date for implementing US border measures under IRAP back to 1 Jan. 2020. See H.R. 2454, ss 776(a) and 776(b), Kerry-Lieberman Draft of 13 May 2010.

[20] The Congressional approval requirement and fast-track override procedure were omitted from Kerry-Lieberman.

multilateral climate change agreement and have GHG emissions commitments that are 'at least as stringent as that of the United States',[21] (2) are parties to a sectoral climate change agreement governing that sector to which the US is also a party, or (3) have an annual energy or GHG intensity that 'is equal to or less than the energy or GHG intensity of such industrial sector in the United States in the most recent calendar year for which data are available'. This test is designed to ascertain whether the US industry has a level playing field, where most competing imports are subject to climate change disciplines equivalent to those in the US. If the President finds that less than 85% of total imports meet these criteria,[22] IRAP would continue to apply to an industrial sector for an additional four-year period.

The House bill directs the EPA Administrator to establish a 'general methodology' for calculating the quantity of such allowances for any 'covered good'. Imports from countries that are parties to a multilateral climate change agreement and have a comparable emissions control regime for that sector would be exempted, along with imports from least developed countries and those with *de minimis* emissions that account for less than 0.5% of total global GHG emissions and represent less than 5% of imports of covered goods in that industrial sector. Otherwise, an importer would be required to present an international reserve allowance to US Customs on entry into the US. Otherwise, imported goods would not be permitted to enter the US customs territory.[23]

While earlier drafts of Waxman-Markey limited the term 'covered goods' to primary products, IRAP covers *any* product manufactured by an eligible industrial sector for purposes of the free emissions rebate programme and 'any manufactured item for consumption' that includes in substantial amounts one or more of the goods produced by an eligible industrial sector. Accordingly, the final bill expands IRAP beyond primary products to downstream products that contain a covered good, for example, a car that contains substantial amounts of covered steel.

1.4. Competitiveness and leakage concerns

Various studies have attempted to analyse the economic costs of controlling GHG emissions. The so-called Stern Review was drafted by a prominent British economist, Sir Nicholas Stern, for the British Treasury Department in 2006. It set the basic parameters for competitiveness impacts by finding that stabilizing CO_2 emissions would cost approximately 1% of global output, a figure that Sir Nicholas later revised upward to 2% because of the accelerating pace of global warming.

---

[21] H.R. 2454, s. 767(c)(1).

[22] Kerry-Lieberman adopts a somewhat different methodology. Instead of focusing on imports, a sector would be exempted from IRAP if 70% of 'global production' in that sector originates in countries that (1) have adopted enforceable, economy-wide emissions reductions target at least as stringent as the US target, (2) are party to a sectoral emissions reduction agreement, to which the US is also a party, or (3) have an energy or GHG intensity that is equal to or lower than that of the US, § 776(c), Kerry-Lieberman Draft of 13 May 2010. Thus, the bill would focus on climate change actions by the country of origin, as opposed to the competing industry.

[23] H.R. 2454, s. 768(a)(1)(D).

Likewise, most US studies have concluded that climate change legislation would have modest effects on overall US Gross Domestic Product (GDP).[24] According to an MIT analysis of Lieberman-Warner, the bill would have led to a 1.1% to 2% annual reduction in US GDP by 2050.[25] EPA estimated that the Waxman-Markey and Kerry-Boxer would result in a modest 1% decline in household consumption.[26] Similarly, the Pew Center for Global Climate Change found that cap and trade would lead to a 2% decline in output for energy-intensive US industries, 'with no discernable effect on employment'.[27]

However, cap and trade clearly would disadvantage certain energy-intensive industries. The Centre for Global Development estimated a 4% reduction in output for energy-intensive sectors.[28] Studies of the initial phase of Europe's ETS cap-and-trade scheme found modest output declines of 0.3% to 2.1%, although this resulted in part from efforts by European Union (EU) Member States to mitigate adverse competitiveness and employment impacts by giving free allowances to vulnerable EU industries.[29] A study by the National Commission on Energy Policy concluded:[30]

> Many business, labor, and political leaders are rightly concerned that climate policies may contribute to the erosion of U.S. manufacturing competitiveness. This challenge is especially acute for energy-intensive basic materials and manufacturing industries, which form the cornerstone of the nation's manufacturing base. There is particular concern about climate policy impacts on this sector, which is especially vulnerable to both rising energy costs and global competition. The findings presented in this report show that climate policies that price CO_2 could have significant impacts on the competitiveness of U.S. energy-intensive manufacturing sectors over the next two decades.

These concerns focus on two separate and distinct (but closely related) unintended consequences of cap and trade: (1) 'industrial competitiveness', and (2) 'environmental leakage'. Industrial competitiveness concerns centre on energy- and trade-intensive industries that have high energy costs and face significant global competition and thus would be vulnerable to production declines, plant closings, job losses, shifts to offshore production, and so forth caused by high-carbon imports that are not covered by equivalent climate change schemes.

While competitiveness and leakage overlap to a degree, 'leakage' centres on the environmental risk that any US emissions reductions under cap and trade could be offset by increased foreign GHG emissions. This risk arises from a flaw in the Kyoto Protocol,[31]

---

[24] Sir Nicholas Stern, *Stern Review: The Economics of Climate Change* (London: HM Treasury, 2006).

[25] Paltsev et al., 'Assessment of U.S. Cap-and-Trade Proposals', MIT Joint Program on the Science and Policy of Global Change Report No. 146 (2008), 52.

[26] Environmental Protection Agency, Office of Atmospheric Programs, *Economic Impacts of S. 1733: The Clean Energy Jobs and American Power Act of 2009* (2009), 18.

[27] Response of the Pew Center on Global Climate Change to Committee on Energy and Commerce and its Subcommittee on Energy and Air Quality on Climate Change Legislation Design White Paper (2008), 2; Aldy & Pizer, 'The U.S. Competitiveness Impacts of Domestic Greenhouse Gas Mitigation Policies', Pew Center on Global Climate Change.

[28] Matoo et al., 'Reconciling Climate Change and Trade Policy', Working Paper No. 189 (Center for Global Development 2009), 18.

[29] Houser et al., 'Leveling the Carbon Playing Field: International Competition and US Climate Policy Design', *Peterson Institute for International Economics* (Washington, DC: World Bank Publications, 2008): 10.

[30] Yudken & Bassi, *Climate Policy and Energy Intensive Manufacturing: Impacts and Options* (National Commission on Energy Policy, 2009), 21.

[31] While the United States signed Kyoto, it was never ratified by the US Senate and thus has never come into force for the US.

which exempted developing countries from any GHG reduction commitments. As a result, India, China, Brazil, South Africa, and other developing countries are not subject to Kyoto's climate change disciplines.[32] Accordingly, any reductions in US carbon emissions could be undercut by increased emissions abroad. Leakage would come about from (1) a shift of production facilities from the US to developing countries with higher carbon emissions and (2) increased imports of high-carbon goods that replace or displace low-carbon US production. The upshot would be that any benefits from reducing US GHG emissions could be undercut by increased emissions elsewhere, as non-covered developing economies expand their production of carbon-intensive goods.

Vulnerable US industrial sectors include cement, steel, glass, fertilizer, plastics, paper, aluminum, and chemicals.[33] One study projects that these sectors could face export and output declines ranging from 4% to 12% of domestic production.[34] Resources for the Future estimated somewhat a lower level of dislocation, ranging from 0.5% to 6%. Studies of the initial stages of the EU's carbon controls project losses ranging from 0.3% to 2.1% of output. While such losses may appear modest in the overall scheme of things; import-sensitive US industries and their unions understandably have pressed Congress for additional emissions rebate allowances and a strong border adjustment mechanism to prevent job losses from imports from developing countries like China, India, and Brazil.[35]

WTO/GATT rules give WTO Members broad autonomy to adopt environmental measures within their territory, but they sharply limit the ability of WTO Members to restrict trade for environmental or other purposes except in certain narrowly defined circumstances.

2. WTO Rules on Border Tax Adjustments of a Carbon or Energy Tax

Under the WTO's border tax adjustment rules, a carbon or energy tax could be rebated on exports and imposed in an equivalent amount on imports of like foreign products.[36] For obvious reasons, such a border carbon tax adjustment would minimize any adverse competitive disadvantage facing export-oriented or import-sensitive US industries.

---

[32] Efforts by the US, EU, and other advanced economies to close this gap have become one of the most contentious issues in negotiations to draft a multilateral successor to Kyoto, since it has become increasingly clear that any real reductions in global emissions will require participation by the major developing country economies, and failure to close this hole would leave energy-intensive industries in developed countries at a serious competitive disadvantage.

[33] US Government Accountability Office, *Climate Change Trade Measures: Considerations for U.S. Policy Makers* (Washington, DC, 2009); Aldy & Pizer, 'The Competitiveness Aspects of Climate Change Mitigation Policies', *Pew Center for Global Environment* (Washington, DC, 2009); Houser et al., 'Leveling the Carbon Playing Field', *Peterson Institute for International Economics* (Washington, DC, 2008): 8.

[34] Mattoo et al., 'Reconciling Climate Change and Trade Policy', Working Paper No. 189 (Center for Global Development, November 2009), 1.

[35] After the introduction of Kerry-Boxer, e.g., the US steel industry criticized its lack of a border adjustment mechanism and inadequate emissions allowance rebates: 'Unless the Senate makes important modifications in the areas of emissions allowances, energy cost impacts, and border adjustment, US steelmakers and our workers will be at a significant competitive disadvantage in the global marketplace, which will result in extensive job losses and emissions migration to overseas markets.' American Iron and Steel Institute, News Release (27 Oct. 2009).

[36] This paper focuses on the trade and competitiveness aspects of climate change legislation and does not purport to address the broader tax policy, macroeconomic, or political dimensions of a carbon or energy tax. Such a 'tax' is generally viewed as a political non-starter, which helps explain the attraction of cap and trade for climate proponents.

Another important advantage of border tax adjustments is that they can be implemented under existing WTO rules, obviating the need for a new set of border climate provisions in the UNFCCC process or the Doha Round. Since the recent Copenhagen Summit underscored the deep differences between the developed and developing countries on global climate change and the Doha Round appears to be going nowhere, such an approach would allow countries to move forward with individual national emissions reduction schemes even in the absence of a multilateral agreement on climate change.

The key WTO provision on border tax adjustments is Article II:2(a) GATT, which provides:

> 2. Nothing in this Article shall prevent any contracting party from imposing at any time on the importation of any product:
>
> (a) a charge equivalent to an internal tax imposed consistently with the provisions of paragraph 2 of Article III in respect of the like domestic products or in respect of an article from which the imported product has been manufactured or produced in whole on in part.

Under GATT border tax adjustment rules, WTO Members are permitted to impose an additional charge on an imported product on entry into their customs territory as long as it corresponds to an internal tax or charge that is being imposed on like domestic products. Related border tax provisions are set out in Article III:2, which provides that such imported products 'shall not be subject to any internal taxes or other internal charges in excess of those applied, directly or indirectly, to like domestic products', and the Notes Ad Article XVI, which set out a corresponding rule that the 'exemption of an exported product from duties or taxes borne by the like product when destined for domestic consumption, or the remission of such duties or taxes in amounts not in excess of those which have accrued, shall not be deemed to be a subsidy'. In combination, the GATT border tax rules create a highly advantageous scheme in which a WTO Member is permitted to equalize its internal tax burdens by imposing an equivalent charge on competing imports at its border, while rebating such tax burdens on exports in order to ensure that domestic goods remain price-competitive in international markets. This system ensures domestic producers a level playing field in confronting imports in their home market and exporting to the broader global marketplace.

Because only a few GATT and WTO disputes have dealt with border tax adjustments, the main guidance on their operation is the 1970 *Report of the GATT Working Party on Border Tax Adjustments*. While the GATT Working Party on Border Tax Adjustments (hereinafter 'Working Party') did not reach consensus on everything, its report offers important and useful guidance on the scope of GATT's border tax provisions. The Working Party started with the observation that 'most members argued that there seemed to have been a *coherent approach* when the relevant articles of the GATT were drafted and there were no inconsistencies of substance between the different provisions

even if the question of tax adjustments was dealt with in different articles'.[37] In other words, the provisions of Articles II, III, VI, and XVI should be treated as part of a coherent, unitary scheme for handling border tax adjustments in GATT.

Next, the Working Party reported a broad consensus that the scope of the border tax provisions was limited to *indirect taxes*, which are imposed on products, as opposed to direct (e.g., income) taxes, which are levied directly on persons or corporations:[38]

> 14. On the question of eligibility of taxes for tax adjustment under the present rules, the discussion took into account the term 'directly or indirectly' (*inter alia* Article III:2). The Working Party concluded that there was convergence of views to the effect that taxes directly levied on products were eligible for tax adjustment. *Examples of such taxes comprised specific excise duties, sales taxes and cascade taxes and the tax on value added*. It was agreed that the TVA, regardless of its technical construction (fractioned collection), was equivalent in this respect to a tax levied directly – a retail or sales tax. *Furthermore, the Working Party concluded there was convergence of views to the effect that certain taxes that were not directly levied on products were not eligible for tax adjustment*. Examples of such taxes comprised social security charges whether on employers or employees and payroll taxes (emphasis added).

The Working Party reported a divergence of views on '"[t]axes occultes", which the OECD defined as consumption taxes on capital equipment, auxiliary materials, and services used in the transportation and production of other taxable goods. Taxes on advertising, energy, machinery, and transport were among the more important taxes which might be involved'.[39] There was also disagreement on 'property taxes, stamp duties and registration duties', although here it was noted that '[m]ost countries do not make adjustments for such taxes, but a few do'.

There ensued a protracted decades-long debate in GATT as to whether indirect taxes on inputs that are not 'physically incorporated' in a final product should be eligible for border adjustment. There was never any disagreement that steel sheet that is incorporated in a car is eligible for a border adjustment. GATT experts, however, disagreed as to inputs that are consumed in the production process, like energy or catalysts. As Professors Matsushita and Schoenbaum[40] have pointed out, Article II:2(a) refers to border adjustments 'in respect of an article *from which* the imported product has been produced in whole or in part'.[41] The words 'from which' suggest that any input from which the imported product is manufactured should be eligible for adjustment regardless of physical incorporation, including energy and catalysts, which are consumed in the production process and are not found in the final product. However, other experts focused on the word 'article', contending that this implied an actual physical component to the final

---

[37] *Report of the Working Party on Border Tax Adjustments*, L/3646, BISD 18S/97, para. 9, adopted on 2 Dec. 1970 (emphasis added). While the report uses the word 'argued', there was broad agreement within the Working Party on this point, centering on the concept of 'trade neutrality'. It is possible that 'argued' was a typographical error and the text should have said that this point was 'agreed', which would make more sense in this context.

[38] *Ibid*., at para. 14.

[39] *Ibid*., at para. 15.

[40] Professor Mitsuo Matsushita and Prof. Emeritus, Tokyo University, Consultant to Fair Trade Center, and former Member of WTO Appellate Body, and Prof. Thomas Schoenbaum, Visiting Professor of Law, George Washington University Law School. Comments at George Washington University Law School discussion group (26 Feb. 2010).

[41] Article II:2(a) GATT (emphasis added).

imported product, particularly in the French text. The debate had practical implications, since it affected both eligibility for border tax adjustments under Article II and the imposition of countervailing duties under Article VI GATT.

This debate, however, was at least partially resolved in the Uruguay Round SCM Agreement, which clarified in the Annexes to the SCM Agreement the status of internal taxes involving non-physically incorporated inputs.[42] Annex I notes that the excessive rebate of indirect taxes represents a prohibited export subsidy, 'provided, however, that prior stage cumulative indirect taxes may be exempted, remitted, or deferred on export products if the prior stage cumulative indirect taxes are levied on inputs that are consumed in the production of the exported product (making normal allowance for waste)'. It adds that '[t]his item shall be interpreted in accordance with the guidelines on consumption of inputs in the production process contained in Annex II'. In turn, Annex II states in footnote 61 that '[i]nputs consumed in the production process are inputs physically incorporated, *energy, fuels and oil used in the production process and catalysts which are consumed in the course of their use* to obtain the exported product'.[43] In short, the Uruguay Round SCM Agreement and its Annexes clarified that the focus should be on whether an input is 'consumed in the production process', not on whether it is physically incorporated in final product. As a result, the SCM makes clear that border rebates of indirect taxes paid on energy and fuels are not export subsidies for WTO purposes.

The Annexes and footnote have broader implications, since as the Working Party noted in 1970, the border tax provisions of the GATT were designed as a 'coherent', unitary scheme. It would make little sense to apply one interpretation of what is eligible for border adjustment for purposes of countervailing duties and export subsidies under Articles VI and XVI and a completely different and totally contradictory interpretation for purposes of evaluating whether a border adjustment can be imposed on imports for purposes of equalizing domestic internal taxes to ensure a level playing field.

In other words, while GATT and WTO Panels have never ruled directly on the issue, the SCM Agreement strongly suggests that a carbon or energy tax on domestic products qualifies for border tax adjustment.[44] If so, the WTO permits a carbon or energy tax to be structured as a tax on energy products (oil, natural gas, coal), a specific tax on specific products (steel) based on their levels of energy consumption or carbon emissions, or a broad-based tax based on energy usage or carbon emissions that applies to all products. If this interpretation is correct, such a tax would represent a WTO-consistent mechanism for addressing global climate change, while at the same time, any adverse trade or competitiveness impacts could be mitigated under a border tax through adjustments on imports and, importantly, on exports as well.

---

[42] Hufbauer, Charnovitz & Kim, *Global Warming and the World Trading System* (Washington: Peterson Institute, 2009), 39–46.

[43] *Ibid*. (emphasis added).

[44] The issues surrounding a border tax adjustment for a carbon or energy tax were discussed in detail in a recent report prepared by the WTO Secretariat. WTO-UNEP, *Trade and Climate Change* (2009).

This outcome tracks a GATT Panel ruling in *United States – Taxes on Petroleum and Certain Imported Substances* (hereinafter '*US-Superfund*').[45] *US-Superfund* involved a challenge by Canada, the EU, and Mexico to a US tax on petroleum and certain petrochemicals. The tax was designed to fund a 'superfund' programme to clean up hazardous waste sites. The taxes covered petroleum products, certain basic feedstock chemicals, and downstream products derived from these chemicals based on value and weight. The US also imposed a corresponding border tax adjustment on imports of Superfund products. The EC argued that the superfund tax was designed to address polluting activities that occurred in the US and fund US environmental activities and thus was inconsistent with the 'polluter pays principle', since foreign producers were not responsible for the underlying hazardous waste and would not benefit from the US clean-up programme. The Panel, however, found that the purpose of a tax did not determine eligibility for such border tax adjustments:[46]

> Whether a sales tax is levied on a product for general revenue purposes or to encourage the rational use of environmental resources, is therefore not relevant for the determination of the eligibility of a tax for border tax adjustment. For these reasons the Panel concluded 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.

Tellingly, the *US-Superfund* Panel did not even mention physical incorporation as a concern.[47] In short, *US-Superfund*, while not definitive, strongly suggests that an internal indirect tax on energy or carbon should be eligible for a border tax adjustment.[48]

A border adjustment mechanism for a carbon or energy tax would have two important benefits. It would mitigate competitive advantages accruing to like (but also high-carbon emission) imported goods by virtue of their production in countries that have opted out of a global climate change regime. At the same time, it would level the playing field for export-oriented US industries, which would not be disadvantaged by a unilateral US decision to adopt stringent domestic measures to control carbon emissions, in advance of any successor to Kyoto. A border adjustment mechanism would also be far easier to administer than IRAP.

From a legal perspective, a carbon or energy tax would offer a straightforward solution to WTO Members who are committed to adopting climate change controls even in the absence of a global agreement in the Copenhagen Accord/UNFCCC process or a WTO agreement on the role of border carbon measures, but nevertheless fear the employment and industrial competitiveness consequences of higher energy prices. In contrast, as we now show, any effort by a WTO Member to unilaterally implement border carbon measures as part of cap-and-trade scheme in advance of a Kyoto successor presents legal risks.

---

[45] *United States – Taxes on Petroleum and Certain Imported Substances* (*US-Superfund*), BISD 34S/136, L/6175 (Adopted 17 Jun. 1987).

[46] *Ibid.*, at para. 5.2.4.

[47] The Chairman of the Panel, Mr Michael Cartland, also chaired the Uruguay Round negotiations on subsidies and countervailing measures.

[48] WTO-UNEP, *Trade and Climate Change* (2009), 104–105.

3. Cap and Trade as a Border Tax Adjustment?

While the 'international reserve allowance' programmes in Waxman-Markey, Kerry-Lieberman, and Lieberman-Warner have sometimes been characterized as 'border adjustment' measures,[49] they are unlikely to qualify under current WTO border tax adjustment rules. The argument for treating cap and trade's international reserve allowances as a border adjustment rests on their 'effects', which in some circumstances can resemble those of a 'tax': '[v]iewed this way, the carbon price signal created by a cap-and-trade scheme would be equivalent to a tax, and the requirement for importers to buy an allowance for the carbon content of their products at auction or from another producer may be judged a "charge equivalent to a tax"'.[50]

However, the *Report of the GATT Working Party on Border Tax Adjustments* made it clear that border tax adjustments are limited to actual rebates of *indirect* taxes and that 'effects' are irrelevant. After addressing the GATT border tax adjustment rules, the Working Party went on to discuss broader philosophical issues involving tax adjustments. This may have been a precursor to a debate then underway about potential changes in the GATT rules to address the disparate treatment of direct and indirect taxes, which disadvantages countries like the US that rely predominantly on direct taxes.[51] Some participants apparently suggested that 'the economic basis of such a clear distinction between indirect and direct taxes has not been demonstrated', but the Report nevertheless found a 'convergence of views that certain taxes that were not directly levied on products were not eligible for tax adjustment'. This referred to social security and payroll taxes levied on producers.[52] In other words, even if direct and indirect taxes sometimes can have similar effects, the Working Party showed no interest in exploring the uncharted waters of comparable tax effects and equivalent tax regimes. This was a wise choice, since just about any government regulation can have effects that are similar to those of a tax. Taking an expansive view of eligibility would have opened a Pandora's box by making a host of regulatory measures eligible for border adjustments and inviting even more widespread trade distortions from a proliferation of new border adjustments, as well as a host of disputes.

While cap and trade resembles a tax in some respects, in reality, it is a hybrid that incorporates elements of traditional government regulation; an innovative, market-based trading scheme; and certain tax-like effects that are designed to create economic

---

[49] See, e.g., Bordoff, 'International Trade Law and the Economics of Climate Policy: Evaluating the Legality and Effectiveness of Proposals to Address Competitiveness and Leakage Concerns', Draft of forthcoming chapter in *Climate Change, Trade, and Competitiveness: Is a Collision Inevitable?* (The Brookings Institution, 9 Jun. 2008).

[50] *Ibid*., at 4.

[51] At the time of the Working Party report, there was an extensive debate about whether the border tax rules put countries that relied primarily on income taxes at a competitive disadvantage, while at the same time 'because of different tax structures and their relation to GATT, one country appears to have a considerable trade protection advantage over another'. John H. Jackson, *World Trade and the Law of GATT* (Bobbs-Merrill Company, 1969), at 298–99.

[52] *Report of Working Party on Border Tax Adjustment*, *supra*, 21. This discussion is contained in a separate section of the report, which went beyond a description of the GATT rules, and presumably was driven at least in part by US unhappiness with the then existing border tax rules. Such US unhappiness continues to this day and has triggered repeated GATT and WTO disputes over US efforts to reduce the tax disparity, e.g., *United States – Tax Treatment of Foreign Sales Corporation*, DS108 (20 Mar. 2000) (US- FSC); *United States – Tax Legislation (DISC)*, BISD 23S/98, L/4422 (12 Nov. 1976).

incentives not to pollute. The core of cap and trade is its permit requirement, which is a traditional regulation requiring a domestic entity to hold an allowance sufficient to cover its total GHG emissions. Unlike a tax, the vast majority of cap and trade's returns would not go to the US Treasury but instead would flow to private parties from selling unused allowances.[53] Most would be distributed free to various stakeholders, where they could be used to cover emissions or re-sold through an ETS.[54] EPA and the US Treasury would realize some revenue from the trading and auctioning schemes, but initially, 85% of the revenues from the issuance and trading of emissions allowances would go to private permit holders and various stakeholders. Thus, unlike a 'tax', most of cap and trade's revenues would flow to private parties, not the government.

In *EEC – Measures on Animal Feed Proteins*,[55] a GATT Panel reviewed an EU regulation that required both producers and importers of vegetable proteins to purchase surplus skimmed milk power from the EU's stockpiles. The measure was designed to get rid of surpluses generated by the Common Agricultural Policy (CAP) by forcing producers and importers to buy them. As part of the EU regulation, an importer was required to post a security deposit for its required purchases of surplus skimmed milk. The EU tried to defend the security deposit as a border tax adjustment under Article II:2(a) GATT and the Note ad Article III. However, a GATT Panel flatly rejected this characterization:[56]

> *The Panel was of the opinion that the security deposit was not of a fiscal nature*. In addition, the revenue from the security deposit accrued to EEC budgetary authorities only when the buyer of vegetable proteins had not fulfilled the purchase obligations. *The Panel further noted that less than 1 percent of security deposits paid, were not released*, indicating compliance with the purchase obligation. *The Panel therefore considered that the security deposit, including any associated cost, was only an enforcement mechanism* for the purchase requirement (emphasis added).

In short, the WTO is likely to look close at whether cap and trade is really of a 'fiscal nature' or whether it represents some other regulatory mechanism. Unless the Appellate Body overrules *EEC – Measures on Animal Feed Proteins* and enters the brave new world of regulatory effects that are equivalent to a tax, even though they are not of a 'fiscal nature', GATT/WTO precedent indicates that emissions allowances would *not* qualify as a 'tax' and international reserve allowances would *not* qualify as WTO-consistent border tax adjustments.

4. The WTO Limits Trade Restrictions Based On Foreign Environmental Practices

While the WTO allows a non-discriminatory internal regulatory measure to be enforced at a WTO Member's border, it sharply limits trade restrictions aimed at objectionable

---

[53] Indeed, under Waxman-Markey & Kerry-Boxer, most cap-and-trade allowances initially would be distributed free of charge, and only 15% would be auctioned by EPA for revenue-raising purposes.

[54] At the same time, covered entities facing high compliance costs or whose emissions are increasing over historical baseline levels could purchase additional allowances through the trading system.

[55] *EEC – Measures on Animal Feed Proteins*, BISD 25S/49, L/4599 (adopted 14 Mar. 1978).

[56] *Ibid*., at 64, para. 4.4.

extra-territorial foreign environmental practices. To date, neither Panels nor the Appellate Body have allowed a WTO Member to impose trade restrictions on imported 'like products' that are aimed at objectionable foreign environmental practices and production methods that do not affect the product's actual physical characteristics and uses and take place outside the Member's territory.

Several WTO experts have explored whether climate change border measures can be implemented as an internal domestic regulation or a technical standard that would bar the sale of all products – imported and domestic – manufactured through processes that generate excessive carbon emissions.[57] This concept centres on *Note ad Article III*, which permits a WTO Member to enforce an otherwise non-discriminatory, WTO-consistent internal regulation at its border, as follows:

> An internal tax or other internal charge, *or any law, regulation or requirement of the kind referred to in paragraph 1* 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 of the kind referred to in paragraph 1, and is accordingly subject to the provisions of Article III.[58]

As Professor Pauwelyn points out:

> 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.[59]

Accordingly, it has been argued that a border carbon measure could legitimately take the form of an across-the-board prohibition on the sale of products manufactured through processes that generate excessive carbon emissions or a technical standard restricting carbon emissions levels for all products.

Thus far, however, the WTO and GATT Panels have uniformly declined to interpret the *Note ad Article III* to permit extra-territorial regulation of foreign environmental practices in the absence of tangible like-product differences. While the Appellate Body

---

[57] See Sidley Austin LLP, *WTO Background Analysis of International Provisions of US Climate Change Legislation* (28 Feb. 2008), 6 ('[T]he United States could respond that the scope of Article III has been interpreted more flexibly than a hard-and-fast line-drawing exercise would permit. See, e.g., a measure such as [the AEP/IBEW border adjustment proposal], regulating whether and how products, including domestic products, can be sold constitutes an internal regulation for purposes of Article III.').

[58] *Notes and Supplementary Provisions, Annex I to General Agreement on Tariffs and Trade* (1994) (emphasis added). The main purpose of the Note is to clarify that internal regulations can be enforced at the border. It is standard practice in many countries for many internal regulations 'affecting the internal sale, offering for sale, purchase, distribution, transportation, distribution, or use of products, and internal quantitative regulations requiring the mixture, processing or use of products in specified amounts or proportions' to be enforced at the border on imported goods by their customs officials. As the Note makes clear, this practice is to be evaluated under Art. III by examining whether the regulation or standard is discriminatory. Absent the Note, such a practice could fall under Art. XI, which bars quantitative restrictions on imports and thus would be highly vulnerable to WTO challenge. See, e.g., Jackson, *World Trade and the Law of GATT* (Bobbs-Merrill Company, 1969), 296 ('Where, however, a country's system of taxation includes a tax on a product at an earlier stage of production (e.g., the European turnover tax systems), then governments find it administratively convenient to impose a like tax on imports at the time of importation.').

[59] Pauwelyn, 'U.S. Federal Climate Policy and Competitiveness Concerns: The Limits and Options of International Trade Law', Working Paper Prepared for Nicholas Institute for Environmental Policy Solutions (Duke University, April 2007), 24.

has shown some receptivity toward more finely tuned like-product distinctions based on environmental and health risks that are reflected in a product's physical characteristics, it has never embraced the much more far-reaching step of allowing physically identical products to be differentiated for 'like-product' purposes based entirely on environmental impacts arising from their production processes.[60] Unfortunately for climate change, higher carbon emissions would not show up in the end product's physical characteristics for purposes of the WTO's like-product analysis but instead would be part of the production process and dissipated in the earth's atmosphere.

In the famous GATT dispute regarding *United States – Restrictions on Imports of Tuna* (hereinafter '*Tuna – Dolphin*') dispute,[61] Mexico challenged a US law that barred the importation of tuna caught through purse-seining methods that led to excessive killings of dolphins. The GATT Panel (in a report that was never adopted, because of the surrounding controversy) found that the measure violated Article XI GATT. Rejecting US efforts to defend the measure under Article III:4 GATT and Note ad Article III, the Panel found that such fishing methods did not lead to physical differences between imported and domestic tuna:[62]

> Article III:3 calls for a comparison of the treatment of imported tuna as a product with that of domestic tuna as a product. Regulations governing the taking of dolphins incidental to the taking of tuna could not possibly affect tuna as a product. Article III:4 therefore obliges the United States to accord treatment to Mexican tuna no less favourable than that accorded to United States tuna, whether or not the incidental taking of dolphins by Mexican vessels corresponds to that of United States vessels.

Because the US law and regulations addressing excessive dolphin mortality did not affect the physical product qualities of US or Mexican tuna, the Panel found that the measure was not an internal regulation for purposes of Article III and the Note. In effect then, *Tuna-Dolphin* bars the use of extra-territorial environmental regulations, unless the objectionable environmental practices lead to tangible, identifiable physical product differences that can be used to justify treating the domestic and imported tuna as separate 'like products', that is, Mexican tuna somehow differed from US tuna harvested through dolphin-safe methods in its *physical* product qualities and characteristics.

While the Appellate Body has shown increasing sensitivity to environmental concerns and backed away from GATT Panel's rigid stance on extra-territorial environmental regulation in *Tuna-Dolphin*, it has done so by a much narrower route of expanding the

---

[60] In *European Communities – Measures Affecting Asbestos and Asbestos-Containing Products* (hereinafter '*EC-Asbestos*'), the Appellate Body's analysis focused on whether the domestic and imported goods are 'like products' based on their physical characteristics and qualities, end uses, consumer perceptions and behaviour, and the product's tariff classification, with an underlying focus on 'the nature and extent of a competitive relationship between and among products'. *EC-Asbestos*, WT/DS135/AB/R, Report of the Appellate Body, AB-2000-11 (12 Mar. 2001), 34–37, 39–40. The Appellate Body concluded that the difference between asbestos and a related substance, PCG fibres, justified treating them as separate like products. *Ibid.*, at 44 ('This carcinogenicity, or toxicity, constitutes, as we see it, a defining aspect of the physical properties of chrysotile asbestos fibres. The evidence indicates that PCG fibres, in contrast, do not share these properties, at least to the same extent. We do not see how this highly significant physical difference cannot be a consideration in examining the physical properties of a product as part of a determination of "likeness" under Article III:4 of the GATT 1994.').

[61] *United States – Restrictions on Imports of Tuna*, DS21/R, BISD 39S/155 (3 Sep. 1991).

[62] *Ibid.*, at para. 5.15.

scope of Article XX exceptions,[63] as opposed to changing its basic approach to Article III 'like-product' interpretation. This approach makes sense, since it keeps the scope of extra-territorial environmental regulation within the narrower bounds of Article XX GATT. In contrast, reinterpreting 'like product' under Article III to include extra-territorial production and processing methods (PPMs) would be ripe for protectionist abuses, for example, by characterizing minor differences in foreign production practices as environmental 'risks'.[64] As a result, it seems unlikely that the Appellate Body would find distinct like products based on their carbon emissions, where no physical differences between the 'like products' exist.

5. Climate Border Measures Would Be Prima Facie Violations of Articles I, III, XI, and XIII GATT

Assuming we are correct that cap-and-trade-based import restrictions would not qualify as border tax or regulatory adjustments, such restrictions would represent prima facie violations of multiple WTO rules.

5.1. MFN violation

Under IRAP, WTO Members who are large GHG emitters, for example, China, Brazil, India, and so forth, and fail to adopt equally stringent climate change regimes would be required to produce an international allowance for US Customs. Otherwise, their goods would be prohibited from entering the US. As a result, from a trade standpoint, they would be treated less favourably than countries deemed to have comparable climate change regimes, least developed countries, and countries with *de minimis* emissions, who all would be exempted under section 768(a)(1)(E) of Waxman-Markey.

Under Article I GATT, 'any advantage, favour, privilege, or immunity granted by any contracting party shall be accorded immediately and unconditionally to the like product originating in or destined for the territories of all other contracting parties'. Since Waxman-Markey would result in less favourable treatment of certain WTO Members based on their status under sections 767 and 768, it would violate Article I GATT 1994.[65] While Sidley Austin LLP's analysis suggests that the Appellate Body might allow such discrimination if the US were to 'point out that the climate change objective is the same but the treatment of Country X and Country Y steel differs because the objective is being met in different ways', it correctly notes that 'this would be novel argument' and

[63] Appellate Body Report in *Brazil – Measures Affecting Imports of Retreaded Tires* (hereinafter '*Brazil-Retreaded Tires*'), AB-2007-4, WT/DS332/AB/R 3 Dec. 2007); Appellate Body Report in *United States – Import Prohibition of Certain Shrimp and Shrimp Products* (hereinafter '*US-Shrimp*') (Art. 21.5), AB-2001-4, WT/DS58/AB/RW (22 Oct. 2001).

[64] This risk has been amply demonstrated in the area of sanitary and phyto-sanitary (SPS) measures, where WTO Members have proven adept at seizing on minor differences in production methods as justification for erecting SPS barriers to imports that compete with domestic farm products. For this reason, the SPS Agreement has generated a host of WTO litigation.

[65] Sidley Austin LLP, *supra,* at 8.

would require the Appellate Body to expand certain aspects of its Article III jurisprudence to Article I, despite textual differences in the language of the two articles. Such a prospect appears extremely remote. The Appellate Body's Article III ruling related to situations where the increased burden on imports could be readily explained by factors or circumstances unrelated to the foreign origin of the product, for example, neutral and objective technical standards.[66] In contrast, the Appellate Body and WTO Panels have taken a dim view of efforts to condition eligibility for lower duties or other trade benefits in a way that leads to less favourable treatment of other WTO Members, particularly when the conditions are based on the product's origin.[67]

5.2. National treatment violation

IRAP would also prima facie violate the WTO's National Treatment principle because certain imported products – those from countries that are large emitters and have failed to take comparable actions on climate change – would be prohibited from entry into the US if they do not have an international emissions allowance. Accordingly, under cap and trade, these products would be treated less favourably than 'like' US products for Article III GATT purposes in violation of the WTO's national treatment principle.

It has been argued that imports of products manufactured through processes that generate high GHG emissions levels are not 'like' US products or those of countries with comparable emissions regimes and thus could be accorded different, and less favourable, regulatory treatment.

The difficulty with such a WTO defence is that the physical characteristics of both the imported and domestic products would be identical. Thus, any effort to draw such a distinction would turn on whether a product produced by a carbon-polluting process is really 'like' one produced by a cleaner process, which results in lower GHG emissions. As discussed, while the Appellate Body has allowed more finely tuned 'like-product' distinctions when a physical difference in a product's characteristics leads to increased environmental risks, it has never allowed 'like products' to be differentiated solely on the basis of their production processes. Instead, in *EC-Asbestos*, the Appellate Body emphasized that 'like product' for Article III purposes is 'fundamentally, a determination about the nature and extent of a competitive relationship between and amongst products'.[68] *EC-Asbestos* underscores the continued importance of physical characteristics

---

[66] As the Panel noted in *Canada – Certain Measures Affecting the Automotive Industry* (hereinafter '*Canada-Autos*'), WT/DS138/R, para. 10.40 (11 Feb. 2000): 'Article I:1 does not prohibit the imposition of origin-neutral terms and conditions on importation.'

[67] See Appellate Body Report in *Canada-Autos*, WT/DS138/R, para. 81 (adopted 19 Jun. 2000) (striking down special exemption from duties where 'granted only where an exporter of motor vehicles was affiliated with a manufacturer/importer in Canada'.); Panel Report in *Indonesia – Certain Measures Affecting the Automobile Industry*, WT/DS54R, para. 147 (adopted 23 Jul. 1998) ('For the reasons discussed above, we consider that the June 1996 car programme which introduced discrimination between imports in the allocation of tax and customs duty benefits based on various conditions and other criteria not related to the imports themselves and the February 1996 car programme which also introduced discrimination between imports in the allocation of customs duty benefits based on various conditions and other criteria not related to the imports themselves are inconsistent with the provisions of Article 1 of GATT.').

[68] *EC-Asbestos*, *supra,* at para. 67.

and competitive relationships in any analysis of 'likeness' under Article III.[69] Under IRAP, the imported and domestically produced products would be physically identical and compete directly against each other in the US marketplace, since any differences in the levels of carbon emissions associated with their production processes would not appear in the final product. As a result, the Appellate Body would be breaking completely new ground if it allowed 'consumer tastes and perceptions' to override its traditional focus on physical characteristics or adopted an entirely new interpretation of 'like product' which allowed a product's heightened carbon emissions to override physical identity and competition. Such a step would open the door to a host of new regulatory trade barriers and raise major risks for the WTO system.

5.3. Articles XI and XIII violations

Because border carbon measures would restrict imports of carbon-intensive products, they raise obvious GATT concerns. Article XI:1 GATT prohibits quantitative restrictions and quotas, as follows:

> No prohibition or restrictions other than duties, taxes or other charges, whether made effective through quotas, import or export licenses or other measures, shall be instituted or maintained by any contracting party on the importation of any product of the territory of any other contracting party or on the exportation or sale for export of any product destined for the territory of any other contracting party.

Because Waxman-Markey's IRAP would impose what is in effect a zero quota on imports of 'covered goods' if the importer does not have an international allowance, it would prima facie violate Article XI. Since imports from certain WTO Members, including those with comparable climate change programmes, least developed countries, and those with *de minimis* emissions, would be permitted to enter without an international allowance, the quota also discriminates against certain WTO Members in prima facie violation of Article XIII GATT.

6. IS IRAP Covered by a Article XX GATT Exception?

Because border carbon measures represent a prima facie violation of multiple GATT rules, much of the debate over the trade effects of climate change has focused on Article XX GATT, which provides a limited and conditional set of exceptions for otherwise

---

[69] After indicating that the definition of 'like product' in Art. III:4 is broader than in Art. III:2 (para. 99) and adopting the four general criteria for evaluating 'likeness' from the *Report of the Working Party on Border Tax Adjustments* (physical characteristics, end use, consumer attitudes, and tariff classification), the Appellate Body stated: 'we believe that physical properties deserve a separate examination that should not be confused with the examination of end-uses. Although not decisive, the extent to which products share common physical properties may be a useful indicator of "likeness". Furthermore, the physical properties of a product may also influence how the product can be used, consumer attitudes about the product, and tariff classification'. *EC-Asbestos*, *ibid.*, at para. 111. Once it was shown that asbestos and PCG fibres were very different, 'a very heavy burden is placed on Canada to show, under the second and third criteria, that chrysotile asbestos and PCG fibres are in such a competitive relationship'. *Ibid.*, at para. 118.

WTO-inconsistent measures that serve certain important public policy purposes.[70] Even if a measure represents a prima facie violation of a GATT or WTO rule, it nevertheless can still be permissible if it is covered by an Article XX GATT exception.[71] Thus, the critical WTO issue is whether Article XX covers, or can be stretched to cover, cap-and-trade-based import restrictions.

6.1. Article XX GATT

Article GATT XX provides:

> Subject to the requirement that such measures are not applied in a manner which would constitute arbitrary and unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures:
>
> (b) necessary to protect human, animal or plant life or health;
> (g) relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption.

The introductory clause of Article XX is commonly referred to as the *Chapeau*. The various listed paragraphs, such as (b) and (g), represent specific policy exceptions from GATT rules.

In *United States – Standards for Reformulated and Conventional Gasoline* (hereinafter '*US-Gasoline*'),[72] the Appellate Body adopted a two-step test for determining whether a measure qualifies for an Article XX exception:

> In order that the justifying protection of Article XX may be extended to it, the measure at issue must not only come under one or another of the particular exceptions – paragraphs (a) to (j) – listed under Article XX; it must also satisfy the requirements imposed by the opening clauses of Article XX. The analysis is, in other words, two-tiered: first, provisional justification by reason of characterization of the measure under XX(g); second, further appraisal of the same measure under the introductory clauses of Article XX.

In other words, for Article XX purposes, the analysis should focus first on whether a measure qualifies under a specific listed exception. Next, the broader trade policy implications of the challenged measure must be examined under the *Chapeau* to determine whether it results in unacceptable discrimination or is a disguised trade restriction. The Appellate Body has put great emphasis on adhering strictly to this sequential analysis:

> The task of interpreting the *Chapeau* so as to prevent abuse or misuse of the specific exception provided for in Article XX is rendered very difficult, if it remains possible at all, where the interpreter (like the Panel in this case) has not first identified and examined the specific exception threatened with abuse. When applied in a particular case, the actual contours and contents of [unjustifiable discrimination and disguised restriction] will vary as the kind of measure under

---

[70] Appellate Body Report, *US-Shrimp*, para. 157.

[71] See Charnovitz, 'Trade and the Environment in the WTO', *Journal of International Economic Law*, vol. 10 (September 2007).

[72] Report of the Appellate Body in *United States – Standards for Reformulated and Conventional Gasoline* (hereinafter '*US-Gasoline*'), WT/DS2/AB/R (adopted 20 May 1996).

examination varies. *The standard of 'arbitrary discrimination', for example, under the Chapeau may be different for a measure that purports to protect public morals than for one relating to the products of prison labor*[73] (emphasis added).

Throughout this analysis, the WTO Member seeking to invoke an Article XX exception has the burden of proof.

In recent cases, the Appellate Body has shown greater flexibility on the use of Article XX for environmental purposes, emphasizing language in the WTO's Preamble on the importance of sustainable development and the WTO's decision to establish a Committee on Trade and Environment. It has explained that these provisions provide 'colour, texture and shaping to our interpretation of the agreements annexed to the WTO Agreement, in this case, [Article XX of] the GATT 1994'.[74] In *United States – Import Prohibition of Certain Shrimp and Shrimp Products* (hereinafter '*US-Shrimp*'), these provisions were cited as justification for adopting a broader interpretation of GATT's environmental exceptions and overruling parts of *Tuna-Dolphin*. They were also cited in *Brazil – Measures Affecting Imports of Retreaded Tires* (hereinafter '*Brazil-Retreaded Tires*'), where the Appellate Body took what appears to be a more lenient approach to Article XX(b). Nevertheless, the imposition of US border carbon measures in a cap-and-trade system would raise major challenges for the WTO and the global trading system and push the outer edges of WTO law.

6.2. Paragraph (g)

Paragraph (g) provides a specific exception for measures 'relating to conservation of exhaustible natural resources'.[75] In interpreting paragraph (g), the WTO has focused on whether (1) the commodity qualifies as an 'exhaustible natural resource', (2) the challenged measure is one 'relating to' conservation of that resource, and (3) the restrictions on imports are made effective 'in conjunction' with limits on domestic production or consumption (i.e., they are 'even-handed').

Since the WTO and GATT have traditionally taken a broad view of what constitutes an 'exhaustible natural' resource, there can be little doubt that climate change measures aimed at protecting the earth's atmosphere would qualify under paragraph (g).[76]

---

[73] Report of the Appellate Body in *US-Shrimp*, para. 120.

[74] *US-Shrimp*, *ibid*., para. 153.

[75] While climate change measures might also qualify as measures 'necessary to protect human, animal or plant life or health', the standard for this exception is harder to meet, because it requires a WTO Member to show that the measure is 'necessary', i.e., there is no reasonable WTO-consistent alternative available to it. GATT Panel report in *United States – Section 337 of the Tariff Act of 1930*, BISD 36S/345, L/6439, para. 5.26 (adopted November 1989). The Appellate Body appears to have taken a much more lenient approach to environmental trade restrictions under para. (b) in *Brazil-Retreaded Tires*, so it is very likely that border carbon measures could qualify under Art. XX(b) as well. However, since para. (b) normally represents a harder test, this paper will focus on whether climate border measures qualify under para. (g).

[76] In evaluating whether a measure qualifies under para. (g), the Appellate Body has looked broadly at the measure itself, as opposed to specific, objectionable elements. In *US-Gasoline*, the Panel struck down a US clean air regulation after finding that the discriminatory element of the regulation (lack of individual baselines for foreign refiners) did not relate to the environment. The Appellate Body reversed, '[The] problem with the reasoning in that paragraph is that the Panel asked itself whether the 'less favourable treatment' of imported gasoline was 'primarily aimed at' the conservation of natural resources, rather than whether the 'measure', i.e., the baseline establishment rules, was primarily aimed at conservation of clean air. The chapeau of Art. XX makes it clear that it is the 'measures' that are to be examined under Art. XX(g) and not the legal finding of 'less favourable treatment'.' *Ibid*., at 16. Thereafter, while finding that the US measure 'related to' natural

The Appellate Body treated clean air as an exhaustible natural resource in *US-Gasoline* and decisively rejected arguments that the term should be limited to mineral or non-living resources in *US-Shrimp*.

In determining whether a measure 'relates to' conservation of an exhaustible resource, the Appellate Body has considered whether the challenged measure has a 'substantial relationship' to conservation of clean air,[77] whether there was a 'means and ends' relationship between a requirement that shrimp be harvested using turtle excluder devices and preventing the incidental capture and mortality of sea turtles,[78] whether the means-end relationship was 'observably a close and real one',[79] and whether the measure was 'primarily aimed at' conservation.[80]

In recent Article XX(g) decisions, the Appellate Body has moved away from the strict extra-territoriality distinctions that underpinned *Tuna-Dolphin*. In *US-Shrimp*, it found that US conservation measures designed to protect migratory sea turtles had 'a sufficient nexus between the migratory and endangered populations of sea turtles involved and the United States for purposes of Article XX(g)'.[81] In a dispute over climate change, the Appellate Body is likely to find a similar nexus, since excessive GHG emissions and global warming outside US borders clearly have the potential to lead to adverse environmental effects within the United States.

Thus, IRAP should have little trouble meeting the requirements for paragraph (g). The international allowances are substantially related to controlling leakage of GHG emissions and would be part of a comprehensive US regulatory programme designed to reduce US GHG emissions. Emissions leakage is a legitimate environmental concern, since it could undermine the environmental benefits of US climate change measures.[82] Absent a comprehensive system of national and global GHG controls, US efforts to reduce its own GHG emissions could be nullified, with adverse environmental consequences for the US and indeed for the world. More broadly, IRAP would be an integral part of a serious, comprehensive US programme to address the long-term risks of global

---

resource conservation under para. (g), the Appellate Body struck down the discriminatory component of the overall regulation under the Chapeau. Thus, here, the WTO's evaluation of 'relating to' for para. (g) purposes would focus on the overall International Reserve Allowance Program, as opposed to its specific components. Similarly, in *Brazil-Retreaded Tires*, the Appellate Body first examined the Brazilian tire programme and found that it complied with para. (b), before evaluating whether the Mercosur exception complied with the Chapeau.

[77] *US-Gasoline*, 19.

[78] *US-Shrimp*, paras 141–142.

[79] *Ibid*.

[80] *US-Gasoline*, 21; *Canada – Measures Affecting Exports of Unprocessed Herring and Salmon*, Report of Panel adopted on 22 Mar. 1988 (L/6268), BISD 35S/98 (hereinafter *'Herring and Salmon'*). While the Appellate Body noted that the 'primarily aimed at' test from the GATT Panel decision in *Herring and Salmon* was not actual treaty language (p. 18), it went on to find that if a measure did not have a 'positive effect on conservation goals, it would very probably be because that measure was not designed as a conservation regulation to begin with' and thus 'would not have been 'primarily aimed at' conservation of natural resources at all'. *Ibid*., at 21.

[81] *US-Shrimp*, para. 133. *Tuna-Dolphin* also involved a migratory species that was not confined to a single WTO Member's territory.

[82] See, e.g., *Brazil-Retreaded Tires*, where the Appellate Body upheld a Brazilian ban on imports of retreaded tires. The Panel found that the import ban led to imported retreaded tires being replaced by retreaded tires made from local casing or new tires that are retreadable, thus reducing the dumping of used tires, which posed a health hazard. *Ibid*., at paras 153–154. The Appellate Body found that the measure was 'necessary' under para. (b), which has an even higher threshold than para. (g).

warming and clearly is far from a thinly disguised protectionist sham. The proposed US cap-and-trade programme, moreover, would be broadly consistent with international climate change initiatives and, at some point, could even be required under a multilateral climate change treaty if the Copenhagen Accord/UNFCCC process ever leads to binding internationally agreed emissions reductions targets. Cap and trade would impose serious costs on the United States and would reflect what appears to be a broad scientific consensus about environmental impacts of global warming. US industry would be subjected to stringent emissions caps, consistent with the 'even-handedness' requirements set out in *US-Gasoline* and *US-Shrimp*, including strict penalties for non-compliance. Finally, there is a clear nexus between limits on domestic and extra-territorial GHG emissions and US environmental conditions. The causes and effects of global warming are not confined to any single WTO Member's territory, just as migratory herring and sea turtles in previous Article XX(g) GATT cases were not confined to any single WTO Member's territory. As such, the risks of rising global GHG emissions in the earth's atmosphere cannot be addressed without joint actions by all countries.

7. Does IRAP Comply with the *Chapeau* to Article XX GATT?

Nevertheless, predicting the outcome of a WTO challenge to cap and trade involves major uncertainties because of the *Chapeau* to Article XX. This uncertainty arises in part from the WTO's fluid and highly case-by-case approach to the *Chapeau*:

> The task of interpreting and applying the chapeau is, hence, essentially the delicate one of locating and marking out a line of equilibrium between the right of a Member to invoke an exception under Article XX and the rights of other Members under varying substantive provisions (e.g., Article XI) of the GATT 1994, so that neither of the competing rights will cancel out the other and thereby distort and nullify or impair the balance of rights and obligations constructed by the Members themselves in that Agreement. *The location of the line of equilibrium, as expressed in the chapeau, is not fixed and unchanging; the line moves as the kind and shape of the measures at stake vary and as the facts making up specific cases differ*[83] *(emphasis added).*

The Appellate Body has stated: 'The weighing and balancing is a holistic operation that involves putting all the variables together and evaluating them in relation to each other after having examined them individually in order to reach an overall judgment.'[84] Abusive conduct can appear both in the face of a measure and, if a measure appears legitimate on its face, in the way that it is applied in practice:[85]

> The task of interpreting the Chapeau so as to prevent abuse or misuse of the specific exception provided for in Article XX is rendered very difficult, if it remains possible at all, where the interpreter (like the Panel in this case) has not first identified and examined the specific exception threatened with abuse. When applied in a particular case, the actual contours and contents of [unjustifiable discrimination and disguised restriction] will vary as the kind of measure under examination varies. *The standard of 'arbitrary discrimination', for example, under the chapeau may be*

[83] *Ibid*., at para. 159.
[84] Appellate Body Report, *Brazil-Tires*, para. 182.
[85] Appellate Body Report, *US-Shrimp*, at para. 160.

> *different for a measure that purports to protect public morals than for one relating to the products of prison labor*[86] (emphasis added).

In other words, the importance of the public policy objective invoked affects the degree of justification required. Throughout this exercise, as in the rest of Article XX, the WTO Member seeking to invoke a GATT exception has the burden of proof:[87]

Accordingly, underlying the interpretation of the *Chapeau* is the principle of good faith:

> The chapeau of Article XX is, in fact, but one expression of the principle of good faith. This principle, at once a general principle of law and a general principle of international law, controls the exercise of rights by states. One application of this general principle, the application widely known as the doctrine of *abus de droit*, prohibits the abusive exercise of a state's rights and enjoins that whenever the assert of a right 'impinges on the field covered by [a] treaty obligation, it must be exercised bona fide, that is to say, reasonably'.[88]

A related goal is preventing abuse of GATT exceptions. As the Appellate Body noted in *U.S-Gasoline*:

> The chapeau by its express terms addresses, not so much the questioned measure or its specific contents as such, but rather the manner in which that measure is applied. It is, accordingly, *important to underscore that the purpose and object of the introductory clauses of Article XX is generally the prevention of 'abuse of the exceptions of [what was later to become] Article [XX].'* This insight drawn from the draft history of Article XX is a valuable one. The chapeau is animated by the principle that while the exceptions of Article XX may be invoked as a matter of legal right, they should not be so applied as to frustrate or defeat the legal obligations of the holder of the right under the General Agreement. If those measures are not to be abused or misused, in other words, *the measures falling within the particular exceptions must be applied reasonably, with due regard both to the legal duties of the party claiming the exception and the legal rights of the other parties concerned* [89] (emphasis added).

In evaluating whether a paragraph (g) measure leads to arbitrary and unjustifiable discrimination, the Appellate Body has looked at various factors, including (1) whether 'the nature and quality of this discrimination is different from the discrimination in the treatment of products which was already found to be inconsistent with the substantive obligations of GATT 1994, such as Articles I, III, or XI'; (2) whether the discrimination is 'arbitrary and unjustifiable in character'; and (3) whether it 'occurs between countries where the same conditions prevail'.[90] In practice, all of the various elements of Article XX – good faith, even-handedness, disguised protectionist intent, blatant or intentional discrimination, adherence to specific requirements of the various exceptions, and the overall 'reasonableness' of a country's actions and policies – tend to come together in the *Chapeau* analysis.[91]

---

[86] Appellate Body Report in *US-Shrimp*, para. 120.

[87] Appellate Body Report, *US-Gasoline*, 21; Appellate Body report in *US-Shirts and Blouses* [add cite].

[88] Appellate Body Report, *US-Shrimp*, para. 158.

[89] Appellate Body Report, *US-Gasoline*, 20; *US-Shrimp*, para. 157.

[90] *Ibid.*, at para. 150. As the Appellate Body noted in *US-Gasoline*, the standard for discrimination in Art. XX of necessity goes beyond the level of discrimination required in Arts I, III, and XIII, since Art. XX presupposes that a measure has already been found to violate a GATT article. *US-Gasoline*, 23.

[91] While the WTO has found several measures to represent 'arbitrary discrimination', e.g., Appellate Body Reports *in US-Shrimp* and *US-Gasoline*, it has been much more reluctant to label a WTO Member's actions as 'disguised

In *US-Gasoline*, Venezuela and Brazil challenged a US clean air regulation that provided individual emissions baselines for US refiners but imposed a single across-the-board baseline for foreign refiners, so they had no opportunity to establish their low emissions levels. The Appellate Body found:[92]

> The resulting discrimination must have been foreseen, and was not merely inadvertent or unavoidable. In light of the foregoing, our conclusion is that the baseline establishment rules in the Gasoline Rule, in their application, constitute 'unjustifiable discrimination' and a 'disguised restriction on trade'.

In recent Article XX(g) cases, the Appellate Body has also focused on whether a law or regulation is designed to coerce other WTO Members or, in contrast, provides sufficient administrative flexibility to take into account different conditions in different WTO Members. In *US-Shrimp*, the Appellate Body criticized the US for applying a single, across-the-board standard requiring the use of turtle excluder devices by all exporting countries, regardless of different country conditions:[93]

> Section 609, in its application, imposes a *single, rigid and unbending requirement* that countries applying for certification adopt a comprehensive regulatory program that is essentially the same as the United States program, without inquiring into the appropriateness of that program for the conditions prevailing in the exporting countries. Furthermore, *there is little or no flexibility in how officials make the determination* for certification pursuant to these provisions. In our view, this rigidity and inflexibility also constitute 'arbitrary discrimination' within the meaning of the *Chapeau* (emphasis added).

As the Appellate Body noted, the effect of the rigid US standard was to coerce foreign countries into adopting the US policy on turtle excluder devices, even if conditions in their territories were different or they had taken other measures to protect endangered turtles:[94]

> Perhaps the most conspicuous flaw in this measure's application related to its intended and actual coercive effect on the specific policy decisions made by foreign governments, Members of the WTO. Section 609, in its application, is, in effect, an economic embargo, which requires all other exporting Members, if they wish to exercise their GATT rights to adopt essentially the same policy (together with an approved enforcement program) as applied to, and enforced on, United States domestic shrimp trawlers.

Such a single, uniform standard may be appropriate for domestic regulations, but:

> it is not acceptable, in international trade relations, for one WTO Member to use an economic embargo to require other Members to adopt essentially the same comprehensive regulatory program, to achieve a certain policy goal, as that in force within the Member's territory, *without taking into consideration different conditions which may occur in the territories of other Members*.[95]

In other words, there must be sufficient flexibility in the administration of any otherwise WTO-inconsistent regulation covered by an Article XX exception for a

---

protectionism' – probably because of the pejorative implications of bad faith. As a result, 'arbitrary discrimination' offers a useful catch-all label for practices that do not pass muster under the Chapeau.

[92] *Ibid*., at 29.

[93] Appellate Body Report, *US-Shrimp*, para. 177.

[94] *Ibid*., at para. 162.

[95] *Ibid*., at para. 164.

particularized inquiry into different conditions in each WTO Member's territory. Unfortunately, the State Department's administration of the US sea turtle programme meant that shrimp caught by identical methods to those required by the US regulations were nonetheless barred from entry into the US because they had been caught in waters of countries that still had not been certified under the programme. In a subsequent Article 21.5 proceeding, the Appellate Body found that changes adopted by the United States meant the US regulations now complied with its earlier ruling because they now allowed imports from countries with sea turtle conservation programmes that were 'comparable in effectiveness [and] give sufficient latitude to the exporting member with respect to the programme it may adopt to achieve the level of effectiveness required'.[96]

The Appellate Body also sharply criticized the failure of the United States to engage in serious international negotiations before resorting to unilateral trade measures on imported shrimp:[97]

> Another aspect of the application of Section 609 that bears heavily in any appraisal of justifiable and unjustifiable discrimination is the *failure of the United States to engage the appellees, as well as other Members exporting shrimp to the United States, in serious, across-the-board negotiations* with the objective of concluding bilateral or multilateral agreements for the protection and conservation of sea turtles, before enforcing the import prohibition against the shrimp exports of those other Members (emphasis added).

Citing the Inter-American Tuna Convention, the Appellate Body found that consensual, multilateral procedures were feasible to protect sea turtles, noting that thus far no efforts had been made by the US to negotiate comparable agreements with trading partners outside the Americas.

Finally, the Appellate Body criticized as 'arbitrary discrimination' the lack of due process protections in the US administration of the shrimp certification programme:

> [W]ith respect to neither type of certification under Section 609(b)(2) is there a transparent, predictable certification process that is followed by the competent United States government officials. With respect to both types of certification, there is no formal opportunity for an applicant country to be heard, or to respond to any arguments that may be made against it, in the course of the certification process before a decision to grant or deny certification is made. Moreover no formal written, reasoned decision, whether of acceptance or rejection, is rendered on applications of either type of certification. Countries whose applications are denied also do not receive notice of such denial (other than by omission from the list of approved applications) or the reasons for the denial. No procedure for review of, or appeal from, a denial of an application is provided.
>
> The certifications processes followed by the United States thus appear to be singularly informal and casual and to be conducted in a manner such that these processes could result in negation of the rights of members.

In sum, in its Article XX(g) jurisprudence, the Appellate Body has focused on certain factors in evaluating whether a paragraph (g) measure is consistent with the *Chapeau,* including the following:

---

[96] Appellate Body Report, *US-Shrimp* (Art. 21.5), para. 144.
[97] Appellate Body Report, *US-Shrimp*, para. 166.

- good faith;
- prevention of abuse or misuse of GATT exception;
- flexible decision-making criteria that take into account different conditions in territories of other WTO Members;
- serious, good faith international negotiations with all similarly situated WTO Members;
- coercive application of trade restriction in such a way as to force other WTO Members to adopt identical or similar policies or measures;
- avoidance of arbitrary treatment of countries where same conditions prevail; and
- due process, including transparency, opportunity to be heard, written decisions, and right of appeal.

Several aspects of IRAP appear vulnerable to a WTO challenge, particularly in the version that passed the House.[98] There can be no doubt that the House bill is a serious, good faith effort to address the dangers of global warming. Its border measures are not overtly protectionist. Nevertheless, a Panel or the Appellate Body could look askance at the bill's broad use of border measures and their deliberately coercive effect on developing countries like Brazil, India, and China.

Finally, despite the Appellate Body's recent sympathy for environmentally motivated trade restrictions, there are reasons to think that the WTO is likely to subject any climate border measures to extremely tough scrutiny. Border carbon measures would affect massive volumes of trade, invite a proliferation of new trade-restrictive actions, and likely lead to mirror retaliation by aggrieved developing countries. In practical terms, such a dispute is likely to evolve into a heated North-South battle in the WTO that pits the US, EU, and other advanced industrialized economies against India, China, South Africa, Brazil, and other developing countries. Such a conflict would pose major institutional risks to the WTO and the Dispute Settlement Understanding.[99] While the Appellate Body has never incorporated adverse trade impacts into weighing and balancing test under the Chapeau, it has examined such impacts in interpreting other parts of Article XX.[100] As a result, a Panel or the Appellate Body may apply its balancing test very strictly, particularly since it will be in a no-win situation.

---

[98] Both Waxman-Markey and its predecessor, the Lieberman Warner Climate Security Act of 2008, were heavily influenced by a WTO analysis prepared by Sidley Austin for American Electric Power and the International Brotherhood of Electrical Workers (IBEW). See, e.g., Andrew W. Shoyer, Esq., Summary of WTO Consistency of International Allowance Program, Sidley Austin (17 Jun. 2008).

[99] Hufbauer, Charnovitz & Kim, *Global Warming and the World Trading System* (Peterson Institute, 2009), 96.

[100] See, e.g., for purposes of determining whether a measure is 'necessary' under Art. XX(b), the Appellate Body has made it clear that the negative trade effects from a WTO-inconsistent measure must be balanced against its public policy justification. The more important the policy objective, the greater the degree of negative trade effects allowed. Thus, as the Appellate Body explained in *China-Audiovisuals:* '[D]etermining whether a measure is "necessary" involves a process of weighing and balancing a series of factors that prominently include the contribution made by the measure to secure compliance with the law or regulation at issue, the importance of the common interests or values protected by that law or regulation, and the accompanying impact of the law or regulation on imports or exports. The greater the contribution a measure makes to the objective pursued, the more likely it is to be characterized as "necessary"' (emphasis added).

7.1. Lack of flexibility/administrative discretion

While Waxman-Markey excludes least developed countries and those with *de minimis* emissions levels, section 767(d) makes the imposition of border measures virtually automatic for eligible industrial sectors, as long as less than 85% of total imports are produced in countries that (1) are parties to a multilateral climate change agreement that includes a 'nationally enforceable and economy-wide GHG emissions reduction commitment for that country that is at least as stringent as that of the United States'; (2) are parties to a multilateral or bilateral sectoral emissions agreement to which the US is also a party, *or* (3) have an annual energy or GHG intensity 'that is equal to or less than the energy or greenhouse gas intensity for such sector in the United States in the most recent calendar year for which data are available'. Judging from the legislative history, these criteria were designed to target China and India,[101] which are major emitters; exempt from existing emissions reductions under the Kyoto Protocol; leaders of the developing country bloc at the Copenhagen Summit; and, at least in the eyes of many Members of Congress and environmental groups, the key obstacle to a multilateral climate change accord.

While the President can try to prevent border measures from going into effect by certifying that requiring international reserve allowances for a specific sector would not be in the US national economic interest or environmental interest, any such certification must be approved by both houses of Congress through a joint resolution under the fast-track procedures in 19 USC 2192. The chances of such a certification being approved over an affected US industry's opposition appear remote. Accordingly, the procedure provides little, if any, administrative flexibility[102] to take into account specific conditions in the territories of other WTO Members that might obviate the need for border measures or might justify mitigating or postponing their application.

Furthermore, the criteria in section 767 do not provide broad discretion for EPA or the President to examine conditions in other WTO Members to evaluate whether a foreign climate regime is 'comparable in effectiveness' to the US cap-and-trade regime, as required by the Appellate Body in *US-Shrimp* (Article 21.5).

To withstand WTO scrutiny, any bill must give the President or EPA sufficient flexibility to take into account different national climate change regimes, different national conditions relating to GHG emissions levels and cuts, and the very real likelihood that any successor to the Kyoto Protocol will lead to differentiated obligations for major developing countries.

---

[101] As Chairman Waxman's Opening Statement on H.R. 2454 explains: '[W]e worked hard to assist industry in making the transition to a clean energy economy. We cannot afford to add significant uncompensated costs that would disadvantage manufacturing and production here compared to other countries that do not have emissions limitations, like China and India'. Opening Statement of Rep. Henry Waxman, Hearing on Allowance Allocation Policies in Climate Legislation: Assisting Consumers, Investing in a Clean Energy Future, and Adapting to Climate Change (9 Jun. 2009).

[102] This provision would operate as an up-or-down decision – a US sector would be subject to the full panoply of international allowance requirements, or it would be completely exempt. In contrast, the Appellate Body in *US-Shrimp* required broad flexibility to adjust for conditions in specific countries, so that different countries could be treated differently.

Such changes would provide greater flexibility for EPA or whoever is charged with administering cap and trade but will also lead to a much more complicated administrative process and make it much more uncertain whether an import-sensitive US industry can secure effective relief against high-carbon imports.

7.2. Lack of due process protections

Under Waxman-Markey, the process for applying US border measures does not provide due process protections, such as transparency, an opportunity to be heard, written decisions, an explanation of the reasons for a decision, and a right of appeal. Indeed, it is not clear whether foreign industries, which would be subject to potential US border restrictions, would have a right to participate in any EPA decision-making proceeding. Such due process procedures could be added by regulation under the Administrative Procedures Act in order to comply with *US-Shrimp*.

Again, the effect of revising cap and trade to add new due process protections to comply with the WTO would be to reduce the automaticity of the statutory process for imposing border measures to protect import-sensitive US industries and complicate and lengthen the administrative process for EPA.

7.3. Role of UNFCCC negotiations

One of the most sensitive issues in any WTO challenge to cap and trade is likely to be the role of the UNFCCC negotiations. In *US-Shrimp*, the Appellate Body determined that the *Chapeau* required the United States to engage in serious, good faith international negotiations aimed at a multilateral agreement to protect sea turtles before unilaterally imposing trade measures limiting shrimp imports under paragraph (g). In a subsequent compliance challenge by Malaysia under Article 21.5 of the DSU to US implementation of the earlier ruling, the Appellate Body clarified that the United States was not required to actually conclude an international agreement, as long as it engaged in serious, good efforts and made 'comparable efforts' with all interested parties and regions.[103]

The United States is a party to the UNFCCC and thus part of the multilateral process for negotiating and drafting a successor to the Kyoto Protocol that would continue global emissions cuts beyond 2012. The United States has never ratified the Kyoto Protocol and is one of the few major economies that have not done so. Thus, one major issue in any WTO challenge is likely to be whether a serious, good faith effort at international climate change negotiations requires the US, EU, and other developed economies to stick

[103] Appellate Body Report in *United States – Import Prohibition of Certain Shrimp and Shrimp Products: Recourse to Article 21.5 of the DSU by Malaysia* (hereinafter '*US-Shrimp (Article 21.5)*'), WT/DS58/AB/RW, paras 122–124 (22 Oct. 2001). Malaysia argued that the US was required to conclude an agreement with all WTO Members. As the Appellate Body noted: 'Requiring that a multilateral agreement be concluded by the United States in order to avoid "arbitrary or unjustifiable discrimination" in applying its measure would mean that any country party to the negotiations with the United States, whether a WTO Member or not, would have, in effect, a veto over whether the United States could fulfil its WTO obligations. Such a requirement would not be reasonable', *US-Shrimp (Article 21.5)*, para. 123.

to the UNFCCC/Copenhagen Accord process and at what point, if any, is a developed economy entitled to resort to unilateral border measures, given the state of the global climate change negotiations at that time. This would be especially complicated if the US unilateral trade measures were to target the major developing economies like India and China, which were exempted from the Kyoto Protocol, since it would invite a divisive battle within the WTO.

While the 1992 UNFCCC Framework contemplates that signatories may take 'precautionary measures to anticipate, prevent or minimize the causes of climate change and mitigate its adverse effects',[104] it is also replete with references to the 'special needs and special circumstances of developing country Parties'[105] and the need for 'the widest possible cooperation by all countries and their participation in an effective and appropriate international response'.[106] The Convention does not deal with border measures per se, except to state in Article 3.5 that '[m]easures to combat climate change, including unilateral ones, should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade' – vaguely tracking the same language as the *Chapeau* to Article XX GATT.[107]

The Appellate Body could simply follow its decision in *United States – Import Prohibition of Certain Shrimp and Shrimp Products: Recourse to Article 21.5 of the DSU by Malaysia* (hereinafter '*US-Shrimp (Article 21.5)*') by allowing the US to resort to unilateral trade measures after participating for a suitable period in the UNFCCC negotiations, but it could also take a stricter view by requiring greater adherence to the multilateral climate change negotiating process. Such an approach would be consistent with the existence of an internationally agreed multilateral UNFCCC framework for negotiating international climate change disciplines, which did not exist in *US-Shrimp*. In addition, such an approach arguably would better uphold the underlying principles of the UNFCCC, which recognizes the need for 'common but differentiated responsibilities'[108] and the Kyoto Protocol, which exempted Annex II developing countries from any GHG reduction commitments. The UNFCCC and Kyoto Protocol thus appear to discourage border carbon measures targeted at developing countries. Indeed, it could be argued that the imposition of such measures would be fundamentally at odds with multilaterally agreed principles for addressing global climate change or at least premature given the incomplete status of the UNFCCC talks. If the negotiations have collapsed, the Appellate Body might have more reason to allow the US to proceed with border measures. If, however, the talks are still ongoing or, as in Doha, the participants are still paying public lip service to their commitment to a multilateral agreement, the rationale for allowing countries to

---

[104] United Nations Framework Convention on Climate Change, Art. 3.3 (1992).

[105] *Ibid*., at Art. 3.2.

[106] *Ibid*., at Preamble.

[107] Article 3.5 of the UNFCCC states: 'The Parties should cooperate to promote a supportive and open international economic system that would lead to sustainable economic growth and development in all Parties, particularly developing country Parties, thus enabling them to better address the problem of climate change. Measures 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] Articles 3.1 and 3.2 UNFCCC.

freelance by imposing unilateral trade measures would be much weaker. It may also be tempted to avoid a difficult and divisive internal battle within the WTO by deferring to the UNFCCC process. Requiring the US (or EU) to stick to the UNFCCC process, or simply finding a decision to resort to unilateral border measures to be premature, would allow the WTO to escape a no-win situation. While such 'political' considerations are technically outside the scope of the DSU, the reality is that they have played a role in past GATT disputes, particularly those involving high stakes and large volumes of trade, and there may be a sense that resolving a dispute of this magnitude may be beyond the DSU's ability and highly undesirable from an institutional standpoint. Deferring to the UNFCCC process would offer an easy way out.

7.4. Inconsistency with global climate change accord?

While Waxman-Markey provides that the IRAP will not take effect if an international climate change accord has entered into force in the US before 1 January 2018,[109] IRAP would remain in effect if such an agreement is completed after that date.[110] In this situation, there is clear potential for conflict between US law and the provisions of an international climate treaty, particularly regarding the treatment of developing countries, which are likely to be subject to more limited obligations or a longer transition under any international climate agreement. The Lieberman-Warner bill authorized EPA in section 6006(g) to 'adjust the international reserve allowance requirements (including the quantity of international reserve allowances required for each category of covered goods of a covered foreign country) as the Administrator determines to be necessary to ensure that the United States complies with all applicable international agreements', but this provision was dropped from Waxman-Markey. Accordingly, the House-passed bill invites conflicts between US border measures and the provisions of any international climate change treaty.[111] The WTO is unlikely to look favourably on purported Article XX(g) measures that violate an international treaty, particularly in view of the Appellate Body's emphasis on the role of international negotiations and respect for international law in *US-Shrimp* and other decisions.

7.5. Discriminatory application

Under *US-Gasoline*, a WTO-consistent environmental regulation must give foreign producers the same opportunities to request individualized treatment under a regulatory standard as are afforded to domestic producers. The Appellate Body struck down a US Clean Air

[109] There were proposals to allow border measures to be imposed before 2020 if an eligible US industry experienced a sharp increase in its production costs under cap and trade that was not adequately addressed by emissions rebate allowances, but these were no adopted in the final bill. See Ways and Means Committee Discussion Draft, s. 905(c) (June 2009).

[110] Indeed, several provisions of IRAP presuppose the existence of an international climate change agreement when decisions as to the application of US border measures to covered imports from particular countries are being made, e.g., ss 767 and 768 of Waxman-Markey.

[111] Such conflicts would be mitigated if the treaty clarifies the scope for border measures and is approved by the US Senate, so that it takes precedence over prior US laws, or if such conflicts are directly addressed in any US implementing legislation.

Act regulation that set an across-the-board baseline emissions standard for foreign refiners because of verification and enforcement concerns, while giving US refiners an opportunity to establish that they were entitled to more favourable individual baselines.[112] While Waxman-Markey would apply domestic allowance requirements on a firm-by-firm basis, section 768 provides that EPA shall establish 'a *general* methodology for calculating the quantity of international reserve allowances that a United States importer of *any covered good* must submit'.[113] As in *US-Gasoline*, if EPA is going to calculate individual allowance levels for US firms based on 'actual emissions per year', it must do the same type of individualized firm-by-firm analysis of actual emissions by foreign producers and for imported products. Any difference in regulatory treatment, such as a 'general', across-the-board methodology for imported covered goods, as opposed to actual emissions calculations for US firms, is also likely to run afoul of the *Chapeau*. This means, of course, that EPA may have to find a way to monitor actual emissions outside US territory by foreign producers.

7.6. Coercive application

During the House Energy and Commerce Committee's discussion of cap and trade, proponents of border measures argued that they would provide leverage to induce the major developing countries to participate in a global climate change agreement.[114] Section 761(c) of Waxman-Markey makes this goal explicit, stating:

> The purposes of subpart 2 [relating to border measures] are additionally. to induce foreign countries, and, in particular, fast-growing developing countries [e.g., China, India, and Brazil], to take substantial action with respect to their GHG emissions consistent with the Bali Action Plan developed under the United Nations Framework Convention on Climate Change.

Such language is likely to receive very close scrutiny from the Appellate Body, which emphasized in *US-Shrimp* that 'it is not acceptable in international trade relations for one WTO Member to use an economic embargo to require other Members to adopt essentially the same comprehensive regulatory programme, to achieve a certain policy goal, as that in force within the Member's territory'.[115] The WTO may take a dim view of any use of border measures as a form of US economic leverage on climate change. This factor would likely to weigh negatively in the WTO's balancing test under the *Chapeau*.

8. Is IRAP a 'Disguised Restriction On Trade'

In applying the *Chapeau*'s prohibition on 'disguised restrictions on trade', the Appellate Body has adopted many of the same factors it uses in applying the accompanying

---

[112] Appellate Body Report, *US-Gasoline*, 23–24.

[113] H.R. 2454, s. 768(a)(1)(c) (emphasis added).

[114] Testimony of Michael G. Morris, Chairman, President, and Chief Executive Office, American Electric Power Before the House Energy and Commerce Subcommittee on Energy and Air Quality (5 Mar. 2008), 9 ('effectiveness of the IBEW/AEP "stick"'); Testimony of Annie Petsonk, International Counsel, Environmental Defence, House Energy and Commerce Committee, US House of Representatives (27 Mar. 2007), 18 ('carrots and sticks').

[115] Appellate Body Report in *US-Shrimp*, *ibid*., at para. 164.

language on 'arbitrary and unjustifiable discrimination'. Thus, in *US-Shrimp*, the Appellate Body cited the 'single, rigid and unbending requirement that countries applying for certification adopt a comprehensive regulatory programme that is essentially the same as the United States' and the lack of administrative flexibility in applying the certification criteria in finding the US regulations in violation of the *Chapeau*.

In evaluating the validity of IRAP, the WTO is certain to focus heavily on the environmental risks posed by GHG emissions leakage. As the Appellate Body noted in *Brazil-Retreaded Tires*, 'the *Chapeau* serves to ensure that Members' rights to avail themselves of exceptions are exercised in good faith to protect interests considered legitimate under Article XX, not as a means to circumvent one Member's obligations towards other WTO Members'.[116] In *Brazil-Retreaded Tires*, the Appellate Body upheld Brazil's import restrictions on imports of retreaded and used tires under the *Chapeau*, finding in a somewhat analogous situation that allowing such imports would have undermined a broader policy goal of reducing Brazilian stockpiles of waste tires that posed a threat to public health because they attracted stagnant water and thus mosquito-borne disease.[117]

Under sections 763 and 768 of Waxman-Markey, industrial sectors eligible for emissions rebates allowances and border measures would be identified through a two-part statutory formula. The first part of the formula focuses on identifying US sectors with high levels of energy intensity and trade intensity (imports plus exports exceed 15% of total sales). This part of the formula could serve as something of a proxy for leakage of GHG emissions, because it would identify sectors where there is significant potential for import substitution. But in some ways, the formula also appears aimed at picking out US sectors that could be disadvantaged because of their high energy costs and high levels of import competition ('trade intensity'). The legislative history of Waxman-Markey underscores the House Energy and Commerce Committee's overwhelming focus on competitiveness, employment, and jobs and is replete with references to the need for border measures to address such losses.[118] Indeed, section 766 originally characterized the purpose of IRAP's border measures as addressing the 'competitive imbalance in the

---

[116] *Ibid*., at para. 215.

[117] The import ban forced Brazilian retreaders to consume domestic used tires, thereby reducing existing stockpiles. The used tires posed a public health threat because they accumulated water and attracted insects, which served as carriers of tropical diseases.

[118] The bill originally stated that the purpose of border measures was to address 'the competitive imbalances in the costs of producing or manufacturing primary products in industrial sectors resulting from the difference between' US and foreign GHG emissions reduction costs. s. 766(a)(2) of H.R. 2454 (as introduced on 9 May 2009)(emphasis added). See also Offices of Speaker Pelosi, Leader Hoyer, the Committee on Energy and Commerce, the Select Committee on Energy Independence and Global Warming, *Building the Clean Energy Economy* (30 Jul. 2009), 12 ('This legislation will strengthen US global competitiveness, helping America become a world leader in new technologies, while preventing American job losses to other countries. The clean energy jobs plan includes critical protection measures for American workers and businesses to prevent the shifting of jobs and pollution to other countries. Under the American Clean Energy and Security Act, energy-intensive, trade-exposed industries like steel will receive allowances to cover transition costs as America moves toward a clean energy future. In addition, the bill establishes critical goals for international climate negotiations, and takes steps to level the playing field to ensure that the United States is not placed at a competitive disadvantage if it addresses global climate change and other nations do not. The bill includes tariff backstops beginning in 2020 on goods imported from countries that do not incorporate the cost of carbon emissions in their production processes.').

costs of producing or manufacturing products resulting from the direct and indirect costs of complying with this title'.[119]

While this provision was changed in the final House bill to refer to 'leakage', the legislative histories of the House and Senate bills[120] are still replete with references to trade, employment, and competitiveness considerations. This provides ample grounds for a Panel or the Appellate Body to conclude that such concerns, as opposed to leakage, heavily shaped IRAP. For example, the second part of the section 768 formula focuses on whether a foreign country has signed a global climate change agreement and agreed to an economy-wide greenhouse gas emissions reduction commitment that is 'at least as stringent as that of the United States', signed a multilateral or bilateral sectoral agreement that subjects its industry to an equivalent emissions regime, or has an energy or GHG intensity 'that is equal to or less than the energy or greenhouse gas intensity for such industrial sector in the United States'.[121] These criteria appear designed to prevent a foreign industry from securing a competitive advantage because its government is not a signatory to a successor to the Kyoto Protocol; is entitled to weaker nationwide emissions cuts under a multilateral climate change agreement; or, for whatever reason, has a higher energy usage and emissions intensity than its US competitor. Emissions leakage, however, is the only WTO-consistent justification for border measures under Article XX(g) and the *Chapeau*.

These criteria, moreover, would preclude EPA from taking into account situations where a developing country is entitled to a weaker GHG emissions reduction target under a multilateral climate agreement. Since 'common but differentiated' responsibility is a key feature of the Kyoto Protocol, it is almost certain to be part of any multilateral agreement reached in the Copenhagen Accord/UNFCCC process. Thus, the rigidity of the statutory criteria could lead to situations where EPA is required to impose border restrictions even though any multilateral climate agreement emerging from the Copenhagen Accord/UNFCCC process involves a lower level of obligations for developing countries. The Appellate Body may take a dim view of such an approach to US treaty obligations, given its emphasis in *US-Shrimp* on the role of international negotiations and good faith.

US-Shrimp and *US-Shrimp (Article 21.5)* also make it clear that any formula for applying trade sanctions must take into account whether a certification requirement is appropriate 'for the conditions prevailing in the exporting countries'. If the environmental justification for border carbon measures is preventing leakage of GHG emissions, then the criteria for climate change border measures should be narrowly focused on leakage.

---

[119] Section 766(a)(2), H.R. 2454 (15 May 2009).

[120] Similarly, a paper issued by the Senate Committee on the Environment regarding an early draft of Kerry-Boxer explains: 'The Clean Energy Jobs and American Power Act doesn't just create the jobs of the future – it also protects existing jobs in the manufacturing sector as our economy transforms. This bill has strong measures to ensure that jobs don't "leak" to other countries, who think they can pollute their way to economic success.' The paper cites 'Support for energy-intensive, trade exposed industries like chemicals' and 'Robust border measures'. *Clean Energy Jobs and American Power Act: Summary of Provisions*.

[121] H.R. 2454, §767(c).

While section 768 states that IRAP's goal is to minimize carbon leakage, its statutory criteria are heavily focused on industrial competitiveness and would limit imports in situations where the environmental rationale could appear questionable. For example, even if imports from countries with high-carbon emissions exceed the 15% statutory threshold in Waxman-Markey, this should not raise leakage concerns as long as the volume of such imports is stable or declining from historical levels, eliminating the risk of low-carbon US production being displaced by high-carbon imports under cap and trade. Similarly, even a high and rising level of imports that exceeds the 15% threshold could reflect a basic competitive advantage by foreign producers, based on lower production and labour costs, as opposed to emissions leakage driven by higher US energy costs under cap and trade. Similarly, leakage should not be a concern if the imports are coming from modern foreign plants with low emissions, even if a foreign industrial sector as a whole may be characterized by higher emissions than its US competitor.[122] Even if a WTO Member has not agreed to an equivalent nationwide GHG target in the UNFCCC process or signed a bilateral sectoral pact with the US promising equivalent reductions, it may have modern production facilities that use advanced environmental technologies with low emissions and thus do not pose a leakage threat. In this situation, leakage would not occur even if imports are increasing beyond the 15% trade-intensity threshold or the 5% *de minimis* level. Again, the imposition of US border carbon measures in such situations could run afoul of the WTO's insistence that any WTO Member seeking to invoke Article XX should engage in a good faith, case-by-case examination of specific country conditions before restricting imports.

Finally, in some situations, in the absence of a multilateral UNFCCC climate change accord, the bill could inadvertently punish imports from economies, like the EU, that have signed the Kyoto Protocol and moved ahead unilaterally with nationwide cap-and-trade systems.[123] Such cap-and-trade systems necessarily would lead to (indeed are designed to foster) situations where certain high-carbon emitters purchase allowances at auction or from firms that have achieved deeper cuts from their historic baselines, or where emissions from a high-carbon source are offset by other carbon reduction methods, such as reforestation projects, or cuts in other sectors.[124] Under Waxman-Markey, these industries could be subject to US IRAP requirements even though a foreign economy in the aggregate has achieved comprehensive GHG emissions reductions by

[122] In a similar situation in *US-Gasoline*, the Appellate Body struck down as arbitrary and unjustifiable discrimination a US clean air regulation that allowed US refiners to seek individual emissions baselines but applied a single, across-the-board standard to foreign refiners with no exceptions for individual foreign plants with lower emissions. Appellate Body Report, *US-Gasoline,* 22.

[123] This situation would not arise if a UNFCCC climate change agreement can be completed, since then such imports would be exempted under §§ 767(c)(1) and 768(a)(1)(E)(i), H.R. 2454.

[124] This difficulty would arise because none of the exemptions would apply (except possibly the sectoral exception if such an agreement were to be negotiated in the future). These firms would not qualify under s. 767(c)(1) in the absence of a multilateral agreement and would not qualify under s. 767(c)(3) because their emissions levels would be higher than those of their US competitors. The EU has adopted a weaker baseline of 1990, so its cuts would not be as stringent as those of the US under Waxman-Markey or Kerry-Boxer.

moving ahead with unilateral climate change reductions in the absence of a multilateral accord.[125]

While these issues could be addressed by expanding EPA's discretion to examine the specific circumstances of foreign industries and adjust any IRAP import measures to specific country conditions, this would make the process for imposing IRAP more complex, fact-intensive, discretionary, time-consuming, and uncertain. Any broad grant of discretion to the US Executive Branch is likely to be strongly opposed by import-sensitive US industries. Above all, these industries will want firm guarantees of a 'level playing field' and a highly predictable, relatively automatic process for securing protection from low-priced, high-carbon imports from China, India, Brazil, and other developing country competitors, as long as specific criteria are met. Absent adequate guarantees of relief against high-carbon imports, they have little incentive to agree to a new US climate change regime. In short, while greater procedural flexibility could improve IRAP's chances of surviving a WTO challenge, it could sink it politically in the US Congress and other democracies, where adoption of a new climate regime requires a broad-based political consensus.

9. Free Allowance Rebates to Trade-Intensive US Industries Would Represent a WTO-Illegal Export Subsidy

Under Waxman-Markey and Kerry-Boxer,[126] energy- and trade-intensive industries would be eligible for free allowance rebates starting in 2012. Section 763(b)(2) adopts a statutory formula in which certain industrial sectors would be 'presumptively eligible' for free emissions allowance rebates designed to offset the cost of purchasing emissions allowances under cap and trade.[127] The rebates would be distributed to owners and operators of each entity in an eligible industrial sector based on that entity's direct and indirect carbon factors, starting in 2012.[128] Beginning in 2026, the rebates would be phased down by 10% annually until they are completely eliminated in 2035. The formula for determining presumptive eligibility is based on a sector's (1) energy or GHG intensity and (2) trade intensity. Under section 763(b)(2)(iii), trade intensity would be determined by the EPA Administrator based on whether 'the industrial sector had a trade-intensity of at least 15%, calculated by dividing the value of total imports and exports of such sector by the value of shipments plus the value of imports of such sector' based on US Census data:

---

[125] Kerry-Lieberman adopts a different methodology that is more likely to survive a WTO challenge. Instead of focusing on imports, Kerry-Lieberman would exclude an industrial sector from IRAP if 70% of 'global production' in that sector originates in countries that (1) have adopted enforceable, economy-wide emissions reductions target at least as stringent as the US target; (2) are parties to a sectoral emissions reduction agreement to which the US is also a party; or (3) have an energy or GHG intensity that is equal to or lower than that of the US, 776(c), Kerry-Lieberman Draft of 13 May 2010. Thus, the bill would focus on overall climate change policies by countries competing in a particular sector, as opposed to levels of emissions by a competing industry. This is more consistent with using Art. XX(g) as a tool to address environmental GHG leakage. On the other hand, it does not guarantee a level playing field for competing US industries and thus would not fully address competitiveness and employment concerns.

[126] The rebate provisions of Kerry-Boxer are virtually identical to those in Waxman-Markey.

[127] H.R. 2454, §763.

[128] H.R. 2454, §764.

$$\frac{\text{Imports} + \text{Exports}}{\text{Shipments} + \text{Imports}} = \text{Trade Intensity}$$

This formula violates Article 3.1(a) of the WTO Agreement on Subsidies and Countervailing Measures (SCM Agreement), which provides:

> 3.1 Except as provided in the Agreement on Agriculture, the following subsidies, within the meaning of Article 1 shall be prohibited:
>
> (a) subsidies contingent, in law or in fact, *whether solely or as one of several other conditions*, upon export performance. (emphasis added)

Under the SCM Agreement, the rebates would constitute a prohibited export subsidy. Article 1 of the SCM Agreement defines a subsidy as a measure that involves a 'financial contribution'[129] by a government, which results in a 'benefit' to the recipient. The article identifies certain practices as subsidies, including where '(i) a government practice involves a direct transfer of funds (e.g., grants, loans, and equity infusions), (ii) potential direct transfers of funds or liabilities (e.g., loan guarantees)' and '(iii)a government provides goods or services other than general infrastructure or purchases goods'. If the rebates were to take the form of monetary payments by EPA, they would represent a 'direct transfer of funds' under Article 1.1(i). If they were to involve the distribution of free emissions allowances, as provided in section 782, these would represent transfers of a subsidized 'good', since the allowances would have monetary value and could be sold by the recipient.[130]

The effect of the statutory formula is to target subsidies to US industrial sectors that face a high level of import competition or are heavily dependent on overseas exports, because of the use of both imports and exports in the numerator. Regardless, the formula appears designed in part to channel allowances to export-oriented US industries in order to ensure that they can remain internationally competitive despite higher energy costs under cap and trade. Because the tie to export performance is laid out in the statute, which clearly and explicitly references the word 'export', it is a de jure export subsidy and thus a straightforward violation of Article 3.1. As the Appellate Body noted in *Canada – Certain Measures Affecting the Automotive Industry*:

> The simplest, and hence, perhaps, the uncommon, case is one in which the condition of exportation is set out expressly, in so many words, on the face of the law, regulation, or other legal instrument.[131]

---

[129] The distribution of free emissions allowances by EPA under the rebate programme would represent a government 'financial contribution' since this term covers revenue foregone. SCM Art. 1.1(a)(1)(ii). The emissions allowances have value and could otherwise be auctioned in order to raise revenues. See, e.g., *United States – Foreign Sales Corporation (Article 21.5)*, paras 89–90 and 98 (29 Jan. 2002).

[130] See, e.g., Panel report in *US-Softwood Lumber III*, para. 7.22 ('The ordinary meaning of the word 'goods' is. very broad and in and of itself does not seem to place any limits on the kinds of "tangible or movable personal property, other than money", that could be considered a good.').

[131] *Canada-Autos*, para. 100.

Even if counsel somehow sought to explain away the use of the word 'exports,' the clear effect of Section 767 is still to channel the benefits so that the 'condition to export is clearly, though implicitly, in the instrument comprising the measure.[132]

Section 763's reliance on exports as part of the formula for measuring trade intensity means it is flatly prohibited by the WTO.[133,134]

10. 'Adverse Effects' or 'Serious Prejudice' under Articles 5 and 6 SCM?

While free emissions allowance rebates could also be challenged as actionable domestic subsidies under Articles 5 and 6 SCM, the outcome of such a WTO dispute is impossible to predict, because their trade effects are not known at this time. Under Article 5, a domestic subsidy is 'actionable' if it causes 'adverse effects' in the form of injury to the domestic industry of another WTO Member, nullification or impairment of benefits, or serious prejudice. Article 6 further clarifies the meaning of serious prejudice, including types of trade-distorting subsidy practices and types of adverse trade effects, for example, the effect of a subsidy is to displace or impede imports or exports of a like product of another WTO Member, have significant price undercutting, or increase the market share of the subsidizing Member for a primary product.

While the emissions allowance rebate programme would provide subsidies to eligible US industries, gauging the trade effects of such subsidies is impossible until data is available on displacement, changes in relative market shares, prices, price undercutting, and so forth.

Similarly, while exports of US goods benefiting from subsidized emissions allowances could be subject to countervailing duties by other WTO Members, the imposition of such duties under Article VI GATT and Part V of the SCM Agreement would require a finding that such goods are causing or threatening material injury. The likelihood of an affirmative injury finding would depend on the volume of imports, their effect on prices, trends in the volume and market share of subsidized imports, the condition of foreign industries producing like products, including actual and potential declines in output, sales, market share, profits, productivity, capacity utilization, and so forth. Again, these factors could exist in the future for specific industries but remain conjectural at this time.

---

[132] *Ibid*.

[133] See, e.g., Appellate Body Reports in *US-FSC*, *Canada-Autos*, DS139, para. 107 (19 Jun. 2000); *Australia – Subsidies Provided to Producers and Exporters of Automotive Leather II*, DS126, para. 9.55 (16 Jun. 1999); and *Canada – Measures Affecting the Export of Civilian Aircraft*, DS70, para. 171 (20 Aug. 1999). There are comparatively few WTO cases involving de jure export subsidies, since defending an explicit export contingency in a law or regulation is widely viewed as a sure loser by most lawyers, so most of the disputes result in a speedy settlement, e.g., *China – Certain Measures Granting Refunds, Reductions or Exemptions from Taxes and Other Payments*, DS358 (June 2007).

[134] That the statutory formula makes import-intensive industries presumptively eligible as well is not a defence, since as the Appellate Body noted in *US-FSC*: 'Our conclusion that the ETI measures grants subsidies that are export contingent in the first set of circumstances is not affected by the fact that the subsidy can also be obtained in the second set of circumstances.' *US-FSC*, para. 8.72.

11. IRAP Versus a Carbon Tax from a Policy Perspective

To date, much of the US debate about cap and trade has focused on the use of border carbon measures to address trade and competitiveness concerns. The WTO legality of such measures is unclear. Improving their chances of surviving a WTO challenges may require changes to expand administrative discretion and improve due process. Moreover, such measures must be narrowly focused on GHG emissions leakage, as opposed to directly aiming to minimize US job losses or mitigate the impact of higher energy costs on specific US industries. As a result, such measures can be poorly suited for addressing job and competitiveness concerns, since leakage and competitiveness are not the same thing.

IRAP is also likely to run afoul of the UNFCCC/Copenhagen Accord process. Under section 767 of Waxman-Markey, IRAP would not take effect if a multilateral agreement on climate change has entered into force by 1 January 2018. The prospects for such an agreement are uncertain, given the fundamental differences between developed and developing countries. However, even successful completion of a multilateral climate change agreement could prove a very mixed blessing, unless all major GHG-emitting nations and industries are required to make equivalent emissions cuts, or some form of strong border remedy can be negotiated, which appears very unlikely.[135] Instead, a multilateral agreement that requires differential cuts by developed and developing countries and does not provide clear authority for border carbon measures to enforce cap and trade is likely to raise further questions about US border carbon measures and further complicate efforts to defend IRAP in the WTO.

Even assuming a strong multilateral climate agreement, the very nature of the cap-and-trade systems contemplated by the UNFCCC would allow some foreign industries to sustain high levels of emissions, as long as a country's aggregate nationwide emissions level is reduced overall. Since GHG reduction commitments can be achieved through alternative mechanisms under a foreign cap-and-trade system, for example, programmes to reduce deforestation and other types of offsets, some foreign industries may escape real emissions cuts altogether or be subject to much lower levels of reductions, giving them an important advantage over US industrial competitors. Finally, like the US and EU, many countries will try to exempt or subsidize their most energy-dependent and trade-intensive industries in order to protect their global competitiveness. As a result, the adoption of cap-and-trade systems around the world might ensure economy-wide equity in terms of emissions reductions and energy costs but would provide no assurance of a level playing field for specific US industrial sectors.

Given the Appellate Body's overarching emphasis on the role of multilateral environmental negotiations in *US-Shrimp*, the WTO is unlikely to allow the US to impose unilateral cap-and-trade border carbon measures that go beyond the terms of a

[135] These issues were some of the biggest obstacles to a multilateral accord in Copenhagen and led to major North-South divisions between the developed and developing countries.

UNFCCC/Copenhagen Accord agreement and interfere with multilaterally agreed carbon reduction programmes by other signatories to a multilateral climate agreement.

While emissions leakage has some correlation to trade and competitiveness concerns, it is an imperfect surrogate and thus unlikely ever to be a fully effective tool for preventing US job losses or ensuring a level playing field. As discussed, the House's statutory formula is likely to lead to an overbroad application of IRAP requirements in circumstances where leakage is not a concern. At the same time, IRAP could disadvantage certain US industries even if import levels in their sector remain under the 15% statutory threshold, since much smaller import market shares have led to affirmative findings of material or serious injury in antidumping and safeguard cases. Moreover, even if a foreign country is participating in a multilateral climate agreement, certain high-carbon foreign industries could be insulated from emissions reductions, if, for example, reductions are achieved through emissions cuts by other sectors or through other mechanisms not involving restrictions on industrial emissions, such as reforestation projects or other domestic offsets, or purchases of foreign offsets. This means certain US industries would still face an un-level playing field, even with IRAP.

Finally, IRAP probably can be rejiggered to improve its prospects of surviving a WTO challenge to protections for import-sensitive industries but the rigidity of the WTO's export subsidy rules means that it would be difficult, if not impossible, to provide equivalent protections for the most globally competitive and export-oriented US industries. Almost any attempt to channel free emissions rebate allowances or other subsidies to export-oriented US industries under sections 762 and 767 would run afoul of the WTO SCM Agreement's strict anti-export subsidy rules. As a result, some of the most globally competitive US manufacturing sectors, for example, chemicals, could not be shielded from higher energy costs under WTO rules in a cap-and-trade system.[136] This would have the perverse effect of undermining the most globally competitive sectors of US manufacturing and undercutting President Obama's goal of doubling US exports in the next five years. This problem would become even more acute if a US-style cap-and-trade system were adopted in a highly export-dependent economy, for example, Japan, Germany, or China.

Although Waxman-Markey could be improved from a WTO standpoint, any WTO-consistent anti-leakage mechanism is likely to be complex, unwieldy, and difficult and time-consuming for EPA to administer. Under the Appellate Body's ruling in *US-Shrimp*, any border measures to address GHG leakage would require an elaborate administrative process that ensures case-by-case review of 'different conditions which may occur in the territories of other Members'. This review must encompass specific conditions in other WTO Members, levels of leakage, steps that mitigate leakage, any

[136] The only WTO-legal way to channel subsidies to export-oriented industries would be to convert the free allowance rebates into a domestic subsidy by making *all* US industries eligible, instead of targeting them to 'trade-intensive' sectors. In this situation, however, free allowances would be subject to the looser domestic subsidy rules in Art. 5 of the SCM Agreement and thus have a better chance of surviving a WTO challenge, absent a finding of 'serious prejudice'. However, this approach would drive up the cost and significantly undermine the environmental benefits of cap and trade.

international agreements, and the comparable effectiveness of foreign carbon regimes, with full due process protections. Any such mechanism is unlikely to satisfy the political demands of import-sensitive US industries, which will want speed and certainty above all in any US border carbon remedy procedure and will (just as they did in the US House of Representatives during the drafting of Waxman-Markey) seek to minimize Executive Branch discretion for fear that foreign policy considerations could intrude in the decision-making process and deny them relief against high-carbon foreign competitors.

While a carbon or energy tax would be a viable alternative, it also is a less than ideal tool. A carbon or energy tax would ensure a level playing field for both import-sensitive industries and US exporters because the WTO permits a comprehensive system of border tax adjustments for both imported and exported products. However, under the WTO's most favoured nation (MFN) principle, a US border tax adjustment must be applied on an MFN basis to all WTO Members. Border adjustments cannot be applied selectively by exempting least developing countries, signatories to a multilateral climate agreement, or those countries taking comparable actions to reduce GHG emissions. A carbon tax adjustment would especially disadvantage imports from countries using cap-and-trade or regulatory approaches to reducing carbon emissions. Products from these countries would face a double burden, since they would be confronted with higher energy or regulatory costs at home because of cap-and-trade or regulatory measures and also would be subject to higher US border carbon taxes on entry into the United States. The effect would be to punish 'good guys' in the climate debate.

While a border tax adjustment system would be easier to administer than cap and trade, it would still be administratively complex, since levels of energy usage or carbon emissions would vary according to the producer's technology and the country of origin. This could require importers to submit detailed information on their domestic carbon and energy usage upon entry into the US and require EPA to track and verify such submissions.[137]

Despite these flaws, a carbon or energy tax still represents the best *interim* solution for countries that decide to adopt unilateral limits on carbon emissions even in the absence of a multilateral climate change agreement. It would at least ensure a temporary level playing field pending negotiation of a multilateral agreement that sets emissions cuts for all major economies and clarifies the role of border carbon measures.[138]

---

[137] The GATT Panel in *US-Superfund* indicated, however, that if such information is not available, a party can use an alternative calculation methodology based on the 'predominant method of production. *US-Superfund*, paras 2.6 and 5.2.9–5.2.10. A nationwide system of emissions rebate allowances and border carbon adjustments would be even more complicated to administer, since it would require a large bureaucracy to make specific emissions calculations for every industrial sector and tens of thousands of individual producers, operate a system of border carbon measures, and monitor and enforce compliance.

[138] While the US Environmental Protection Agency is drafting GHG emissions regulations under the Clean Air Act based on the Supreme Court's decision in *Massachusetts v. EPA*, 549 US 497 [2007], this would be the worst approach from a trade and competitiveness perspective. EPA does not have any independent authority to restrict imports under the Clean Air Act. Because Congress has carefully guarded its Constitutional authority to regulate international trade, it has

12. Border Measures as Negotiating Leverage?

While cap-and-trade proponents have argued that the threat of border measures would be an effective 'stick' to pressure developing countries like Brazil, India, and China into binding GHG emissions reductions,[139] threatening the developing countries with unilateral trade sanctions is a risky strategy that could well backfire, particularly if wielded in the form of a statutory club. Such a step would be confrontational and worsen the deep North-South divide in the UNFCCC process. Since these divisions nearly led to a collapse of the Copenhagen Summit before President Obama rescued it with a last minute political agreement,[140] such unilateral trade sanctions risk further inflaming existing differences and undermining prospects for a global consensus in which India, China, and other developing countries agreed to binding GHG reduction targets, which are needed to ensure a competitive balance. As the Pew Center for Global Climate Change noted:[141]

> The message projected by such an approach would be that the United States is prepared to wield a unilateral 'stick' to ensure that its efforts to reduce GHG emissions are matched by other countries. Given the history and present context of international climate relations, such a message could produce more harm than good. From the perspective of the international community, the United States has failed to begin honoring its responsibility and commitment to address climate change. Enacting mandatory domestic GHG limits would begin to address these concerns. But to simultaneously threaten unilateral action against other nations deemed laggards would be regarded as confrontational – rather than cooperative – and not in keeping with the spirit of the Bali accord.

As then US Trade Representative Susan Schwab warned, threatening trade sanctions is a two-way street and would invite retaliatory restrictions by China and India on US exports:[142]

> The greater risk is that import measures emanating from U.S. legislation could prompt mirror action (or simple trade retaliation) by other countries – with U.S. exports being among the targets. Moreover, the central premise of this type of approach is doubtful – that the threat of import measures will bring developing countries to the table. In fact, the threat could easily backfire.

---

delegated authority to the Executive Branch to limit imports or impose tariffs only in limited and very narrowly defined circumstances. Thus, any effort by the President to address the ensuing trade damage to US industry from broad-based EPA regulations would likely require declaring an international emergency under the International Emergency Economic Powers Act (IEEPA). 50 USC 1701.

[139] Testimony of Annie Petsonk, International Counsel, Environmental Defence, House Energy and Commerce Committee, US House of Representatives (27 Mar. 2007), 18 ('carrots and sticks'); testimony of Michael G. Morris, Chairman, President, and Chief Executive Office, American Electric Power Before the House Energy and Commerce Subcommittee on Energy and Air Quality (5 Mar. 2008), 9 ('As global political pressure for action on climate change intensifies, the effectiveness of the IBEW-AEP "stick" is becoming apparent.').

[140] Copenhagen Accord, United Nations Framework Convention on Climate Change, Decision -/CP.15 (18 Dec. 2009). Under the Copenhagen Accord, the participants reiterated their political commitment to enhance long-term cooperative action to address climate change and agreed that industrialized countries and certain non-Annex I developing countries would submit specific economy-wide emissions targets by 31 Jan. 2010.

[141] Response of the Pew Center on Global Climate Change to Committee on Energy and Commerce and its Subcommittee on Energy and Air Quality, US House of Representatives, on Climate Change Design White Paper: Competitiveness Concerns/Engaging Developing Countries (2008).

[142] US Trade Representative Susan C. Schwab, Letter to Ranking Member Rep. Joe Barton, House Energy and Commerce Committee, US House of Representatives (4 Mar. 2008).

> Developing countries could resent what they perceive to be U.S. strong arm tactics and arguably be less – not more – amenable to work on the hard issues in international climate negotiations.

The US is vulnerable to foreign counter-measures, since our high levels of carbon emissions provide ample basis for any country looking for a pretext to impose mirror sanctions on US exports. Increasing US reliance on exports to support future economic growth and manufacturing jobs,[143] particularly to developing country markets like China and India, and US dependence on continued foreign purchases of US Treasury bonds means that a large-scale trade conflict could carry high costs and risk unsettling financial markets.[144] Finally, it is hardly clear whether such measures would provide sufficient trade leverage to force major developing economies like China, India, and Brazil into binding emissions restraints.[145]

In short, the ideal solution to trade and competitiveness concerns would be a Copenhagen Accord/UNFCCC climate change agreement that includes binding emissions targets for all countries and clarifies the use of border carbon measures. However, the prospects for such an agreement are uncertain at best, and US chances of getting the major developing economies to agree to equivalent GHG commitments appear minimal.[146]

13. Conclusion[147]

This paper takes no position on whether cap and trade or a carbon tax would represent sound climate or tax policy but instead focuses solely on whether cap and trade or a carbon tax could withstand a WTO challenge. Briefly summarized, the key conclusions are as follows:

(1) While Waxman-Markey's WTO problems are not necessarily fatal, the legal changes required to improve cap and trade's chances of surviving a WTO challenge would seriously injure its political prospects, since they would introduce greater administrative complexity and uncertainty to the application of border measures.

---

[143] In his 2010 State of the Union Address, President Obama announced a goal of doubling US exports over the next five years.

[144] *Ibid*.; see, e.g., US Chamber of Commerce and National Foreign Trade Council comments.

[145] Gary Hufbauer estimates that US exports account for only 0.5% of Chinese iron and steel production, 0.3% of its primary aluminum; 0.9% of cement; 0.1% of pulp and paper, and 0.5% of nitrogenous fertilizers. These figures are not enough to warrant China turning its economy upside down to accommodate US environmental demands. Hufbauer, 'Competitiveness Concerns and the Latest Data', The GMF/Nicholas Institute on Cap-and-Trade, Competitiveness and International Trade (17 Jul. 2009), 5. China and India also account for a relatively small share of US imports of many key carbon-intensive products. See Hufbauer, Charnovitz & Kim, *Global Warming and the Global Trading System* (Peterson Institute, 2009), 13. The impact of US sanctions could be further reduced if Chinese and Indian productions are diverted to other global markets to replace goods that are being shipped to the US in their place. On the other hand, the Center for Global Development estimates that the most extreme forms of border measures would reduce Chinese and Indian exports by between 16% and 21%, but this would require across-the-board measures by all industrial countries acting in unison. Matoo et al., 'Reconciling Climate Change and Trade Policy', Working Paper No. 189 (Center for Global Development, 2009), 18.

[146] Given their exclusion from Kyoto Protocol, China and India have little incentive to agree to equivalent cuts.

[147] Hufbauer, 'Climate Change: Competitiveness Concerns and Prospects', Testimony Before Subcommittee on Energy and Air Quality, House Energy and Commerce Committee, US House of Representatives (8 Mar. 2008).

(2) Even if only a handful of energy- and trade-intensive US industries are vulnerable to increased import competition, there is intense political pressure to maintain US industrial competitiveness and prevent job losses through some form of border measures against high-carbon imports from China, India, and other developing countries.

(3) From a WTO standpoint, the most straightforward solution to trade and competitiveness concerns would be a carbon or energy tax. Under the WTO's border tax adjustment rules, such a tax could be rebated on exports and imposed in an equivalent amount on like imports. Accordingly, border tax adjustments could be used to minimize any competitive disadvantages to both export-oriented and import-sensitive industries, ensuring a level playing field.

(4) Waxman-Markey's border carbon measures would not qualify as border tax adjustments under existing GATT rules, because cap and trade is a regulatory scheme, not a 'tax'. Accordingly, absent a fundamental (and unrealistic) change in the current WTO/GATT border tax adjustment rules, cap and trade would not qualify for a border adjustment and thus would represent a prima facie violation of Articles II, III, XI, and XIII GATT.

(5) While Waxman-Markey's border measures could qualify for the Article XX(g) GATT exception for measures to conserve an exhaustible natural resource, such an approach involves serious legal uncertainties and would stretch the limits of the Appellate Body's evolving Article XX environmental jurisprudence. Because a WTO dispute over climate change border measures would have extremely high stakes for the global trading system and pose institutional challenges for the WTO, the Appellate Body is likely to require strict adherence to WTO requirements.

(6) Waxman-Markey's and Kerry-Boxer's grant of free emissions allowances to energy- and trade-intensive industries represents a WTO-illegal export subsidy under Article 3.1 of the WTO SCM Agreement. While the WTO allows the US to shield import-sensitive industries from the effects of high-carbon imports by handing out free emissions allowances, the SCM Agreement significantly limits the ability of US policymakers to shield US *exports* from higher energy costs. As a result, cap and trade would put export-oriented US industries at a serious competitive disadvantage. This quirk in WTO rules may make a US-style cap-and-trade system unworkable for highly export-oriented economies like Japan, Germany, and China.

(7) Article XX(g) GATT's focus on resource conservation limits its utility, since the justification for any import restrictions must be GHG leakage, not industrial competitiveness or job losses.

(8) The imposition of unilateral border carbon measures on India, China, and other developing countries is unlikely to enhance prospects for a

UNFCCC/Copenhagen Accord agreement on global climate change and would invite costly retaliation by foreign governments against US exports.

(9) The ideal solution to climate change would be a fair and effective legal framework that binds all major emitters to ambitious targets for GHG reductions and defines the permissible scope of border carbon measures, as part of the UN's Copenhagen Accord UNFCCC process, but such an agreement is a long way off and prospects for success are unclear at best.

(10) A carbon tax would be the best interim solution to climate change pending an international climate change agreement, since it can be implemented under existing GATT/WTO rules without a new multilateral consensus on border measures in the Copenhagen/UNFCCC process or WTO. But while a carbon tax would provide much better protection to US industries and jobs, it still would be far from ideal.

Submission Guidelines

The following is a brief guide concerning the provision of articles which may be of assistance to authors.

1. Articles must be submitted in Microsoft Word-format, in their final form, in correct English. The electronic file can be presented to the Editor by email, through edwin.vermulst@vvg-law.com.
2. Special attention should be given to quotations, footnotes and references which should be accurate and complete. In the case of book references please provide the name of author, publisher, place and year of publication.
3. Tables should be self-explanatory and their content should not be repeated in the text. Do not tabulate unnecessarily. Keep column headings as brief as possible and avoid descriptive matter in narrow columns.
4. A brief biographical note, including both the current affiliation as well as the email address of the author(s), should be provided in the first footnote of the manuscript.
5. Due to strict production schedules it is often not possible to amend texts after acceptance or send proofs to authors for correction.
6. Articles which are submitted for publication to the editor must not have been, nor be, submitted for publication elsewhere.
7. The article should contain an abstract, a short summary of about 100 words, placed at the beginning of the article. This abstract will also be added to the free search zone of the Kluwerlaw Online database.