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THE ECONOMIC IMPACT OF CANADA-UNITED STATES REGULATORY CONVERGENCE: FROM THE CANADA- UNITED STATES AUTO PACT TO THE NORTH AMERICAN FREE TRADE AGREEMENT AND BEYOND

Session Chair – Wilbur Leatherberry
United States Speaker – Meera Fickling
Canadian Speaker – Maureen Irish

INTRODUCTION

Wilbur Leatherberry

MR. LEATHERBERRY: Thank you, Dan. On behalf of my faculty, colleagues, and the others in the Law School community, I welcome you to Case Western Reserve University School of Law for this conference. I have the privilege of introducing the panel for the Economic Impact of Canada-United States Regulatory Convergence: From the Canada-United States Auto Pact to the North American Free Trade Agreement and Beyond.

One of the things I remember about Henry is a fourth principle that Dan did not mention, and that is that the conference should run on schedule. One of my jobs is thus to try to keep us on schedule. I will not take too much time, but I do want to introduce our two speakers.

Meera Fickling¹ is a research analyst from the Peterson Institute for Economics in Washington, D.C.² She has been a research analyst since 2008. Her areas of research include climate change and trade issues, particularly in North America. She is co-authoring a book on the North American Free Trade Agreement (NAFTA)³ and climate change policy to be published in 2010.

Maureen Irish⁴ is a professor at the Faculty of Law of the University of Windsor, Ontario. She teaches international economic law, international

¹ *Biography: Meera Fickling*, PETER G. PETERSON INST. FOR INT'L ECON., http://www.iie.com/staff/author_bio.cfm?author_id=594 (last visited Jan. 5, 2011).

² PETER G. PETERSON INST. FOR INT'L ECON., <http://www.iie.com> (last visited Oct. 5, 2010).

³ JEFFREY J. SCHOTT & MEERA FICKLING, REVISITING THE NAFTA AGENDA ON CLIMATE CHANGE, No. PB10-19 (2010), available at <http://www.iie.com/publications/pb/pb10-19.pdf>.

⁴ *Maureen Irish – Biography*, U. WINDSOR, <http://web4.uwindsor.ca/law/irish> (last visited Oct. 5, 2010).

business transactions, Canada-United States legal issues, and private international law, what we would call our conflicts of law. She is the author of *Customs Valuation in Canada*,⁵ and editor of *The Auto Pact: Investment, Labour and the WTO*,⁶ and some other publications. She has served on dispute settlement panels under the Canada-United States Free Trade Agreement⁷ and NAFTA.

Without further ado, I will introduce Meera Fickling, who will be our first speaker. We will reserve time at the end of this program for questions.

UNITED STATES SPEAKER

*Meera Fickling**

MS. FICKLING: Thank you.⁸

⁵ MAUREEN IRISH, *CUSTOMS VALUATION IN CANADA* (Don Mills ed., CCH Canadian Limited 1985).

⁶ *THE AUTO PACT: INVESTMENT, LABOUR AND THE WTO* (Maureen Irish ed., Kluwer Law International 2004).

⁷ U.S.-Canada Free-Trade Agreement Implementation Act of 1988, Pub. L. No. 100-449, 102 Stat. 1851 (1988).

* Meera Fickling has been a research analyst at the Peterson Institute since 2008 and works with Senior Fellows Gary Clyde Hufbauer and Jeffrey J. Schott. Her areas of research include climate change and trade issues, particularly in North America. She is co-authoring a book on NAFTA and climate change policy to be published in 2010. Her prior work at the Institute includes NAFTA and Climate Change: Legislate Nationally, Cooperate Regionally (paper presented at the C.D. Howe Institute, October 2009) and Setting the NAFTA Agenda on Climate Change (PIIE Policy Brief 09-18, August 2009). She graduated *summa cum laude* from the College of William and Mary, where she majored in economics.

⁸ Meera Fickling submitted a paper in lieu of her remarks.

FILLING THE LEGISLATIVE VACUUM: LOCAL, REGIONAL, AND EPA CLIMATE CHANGE EFFORTS AND UNITED STATES-CANADA INTEGRATION

By Meera Fickling*

Introduction

The December 2009 Copenhagen climate conference was not a high point in the history of international negotiations, but many viewed the non-binding commitments made there to be a step in the right direction.⁹ Both the United States and Canada pledged a 17% reduction in greenhouse gas (GHG) emissions.¹⁰ Along with international pressure, these commitments encouraged other countries such as China, Brazil, and India to follow suit with limits on the emissions intensity of their economies.¹¹

These commitments follow a long history of inaction, however, which has proven difficult to reverse. The sharp recession in 2009 significantly reduced carbon emissions,¹² making targets set according to 1990 or 2005 levels easier to meet. But the wrenching economic adjustments have conversely made the task all the more difficult politically, and both United States and Canadian governments have chosen not to enact economy-wide climate change regulation at this time.¹³

* This article draws heavily on the forthcoming book, *NAFTA and Climate Change* by Meera Fickling and Jeffrey J. Schott, to be published by the Peterson Institute for International Economics in early 2011.

⁹ TREVOR HOUSER, PETERSON INST. FOR INT'L ECON., POLICY BRIEF: COPENHAGEN, THE ACCORD, AND THE WAY FORWARD (2010), available at <http://www.iie.com/publications/pb/pb10-05.pdf>; Jennifer Morgan, *Reflections from Copenhagen: The Accord and the Way Forward*, WORLD RESOURCES INST. (Dec. 29, 2009), <http://www.wri.org/stories/2009/12/reflections-copenhagen-accord-and-way-forward>.

¹⁰ Juliet Eilperin, *U.S. pledges 17 percent emissions reduction by 2020*, WASH. POST, Jan. 29, 2010, at A02; Press Release, Env't Can., Canada Lists Emissions Target under the Copenhagen Accord (Feb. 1, 2010) (on file with author), available at <http://www.ec.gc.ca/default.asp?lang=En&n=714D9AAE-1&news=EAF552A3-D287-4AC0-ACB8-A6FEA697ACD6>.

¹¹ HOUSER, *supra* note 9, at 1.

¹² Energy-related GHG emissions fell by three percent in 2008 and seven percent in 2009. See *U.S. Carbon Dioxide Emissions in 2009: A Retrospective Review*, ENERGY INFO. ADMIN. (May 5, 2010), <http://www.eia.doe.gov/oiaf/environment/emissions/carbon/>.

¹³ See Carl Hulse & David M. Herszenhorn, *Democrats Call Off Climate Bill*, N.Y. TIMES, July 22, 2010, at A15 ("Bowling to political reality, Senator Harry Reid . . . said the Senate would not take up legislation intended to reduce carbon emissions blamed as a cause of climate change," because, as he told reporters, "we don't have the votes."); see also Susan Dela-

In the existing vacuum of legislative action, various states and provinces have pursued their own climate change policies.¹⁴ Federal regulatory agencies in the United States may also play a role in the near future. Although bilaterally coordinated, economy-wide climate legislation would be the best policy for both countries, it seems the near-term goal will instead be to coordinate this patchwork of policies in the absence of leadership from national legislatures.

Why Have an Integrated Energy Policy?

Canada and the United States share a common environment and a long history of environmental cooperation. The 1909 Boundary Waters Treaty established the International Joint Commission as a forum for cooperation on water issues,¹⁵ and the 1978 Great Lakes Water Quality Agreement established common water quality responsibilities for the region.¹⁶ In addition, the United States and Canada have signed acid rain and trans-boundary smog agreements.¹⁷

The North American Free Trade Agreement (NAFTA) region also has an interdependent energy market. How energy is produced, used, and traded has a large impact on GHG emissions and affects how each country can adapt to a low-carbon future. The United States derives about a fifth of its oil from Canada,¹⁸ and in 2008 about two thirds of the crude oil produced in Canada was shipped to the United States.¹⁹ While Canadian electricity does not make up a large portion of most states' electricity portfolios, it does

court, *Climate bill, Commons crushed in one blow*, TORONTO STAR (Nov. 17, 2010), <http://www.thestar.com/news/sciencetech/environment/article/892053--climate-bill-commons-crushed-in-one-blow> (Conservative senators killed climate-change bill passed by a majority of elected MPs in the Commons, and Prime Minister Harper applauded the bill's defeat stating, "[Bill C-311] set irresponsible targets and did not lay out any measure of achieving them, other than by shutting down sections of the Canadian economy and throwing hundreds of thousands and possibly millions of people out of work.").

¹⁴ RYAN WISER & GALEN BARBOSE, LAWRENCE BERKELEY NAT'L LAB., RENEWABLES PORTFOLIO STANDARDS: A STATUS REPORT WITH DATA THROUGH 2007, at 3 (Apr. 2008), available at <http://eetd.lbl.gov/ea/ems/reports/lbnl-154e.pdf>.

¹⁵ Boundary Waters Treaty, U.S.-Gr. Brit., Jan. 11, 1909, 36 Stat. 2448.

¹⁶ Great Lakes Water Quality Agreement, U.S.-Can., Apr. 15, 1978, 23 U.S.T. 301.

¹⁷ Agreement on Air Quality, U.S.-Can., Mar. 13, 1991, 30 I.L.M. 676 (containing provisions to reduce acid rain); Protocol Amending the Agreement on Air Quality, U.S.-Can., Dec. 7, 2000, 2000 WL 33155943 (adding provisions to reduce transboundary smog emissions).

¹⁸ CARL EK & IAN FERGUSSON, CONG. RESEARCH SERV., RL96397, CANADA-U.S. RELATIONS 15 (Sept. 3, 2010), available at <http://www.fas.org/sgp/crs/row/96-397.pdf> [hereinafter CUS RELATIONS REPORT].

¹⁹ See, e.g., GOVERNMENT OF ALBERTA, ALBERTA'S ENERGY INDUSTRY: AN OVERVIEW 2009, at 1 (2010), available at http://www.energy.gov.ab.ca/Org/pdfs/Alberta_Energy_Overview.pdf.

comprise a major percentage of total consumption in a few border states. Vermont obtains almost 40% of electricity consumed from Quebec,²⁰ and North Dakota and Minnesota obtain more than 10% of electricity consumed from Manitoba.²¹

In addition, Canada is the largest supplier by far of energy-intensive manufactures to the United States, including steel (20% of United States imports), cement (53% of United States imports), paper (52% of United States imports), and aluminum (55% of United States imports).²² In total, Canada exported forty-four billion dollars of highly traded, energy-intensive products to the United States in 2008.²³ As a result, both countries are justifiably concerned about maintaining a level North American playing field for energy-intensive manufacturing.

Given the two countries' strong energy interdependence, decisions that affect energy consumption in one jurisdiction will likely have spillover impacts bilaterally. Consequently, the region has a strong interest in harmonizing climate policies. Below, this paper lays out the policies on the table in the United States and Canada, examines their implications for bilateral trade and cooperation, and offers suggestions for coordinating these measures.

Canadian Policy

Canadian policy faces cross-cutting environmental and economic interests pitting climate change objectives against the exploitation of natural resources, especially oil sands. In both areas, Canadian officials are concerned that their policies may create frictions with their NAFTA partners that could affect regional trade and investment.²⁴ Because Canada exports tens of billions of dollars of energy-intensive products to the United States,²⁵ it is highly concerned about competitiveness impacts on these industries should it fail

²⁰ JEFFREY J. SCHOTT & MEERA FICKLING, PETERSON INST. FOR INT'L ECON., POLICY BRIEF: SETTING THE NAFTA AGENDA ON CLIMATE CHANGE 7 (2009), available at <http://www.iie.com/publications/pb/pb09-18.pdf> [hereinafter NAFTA AGENDA].

²¹ *Id.*

²² See JEFFREY J. SCHOTT & MEERA FICKLING, PETERSON INST. FOR INT'L ECON., REVISITING THE NAFTA AGENDA ON CLIMATE CHANGE 2 n.3 (2010), available at <http://www.piie.com/publications/pb/pb10-19.pdf>; see also GARY CLYDE HUFBAUER & JISUN KIM, PETERSON INST. FOR INT'L ECON., U.S. CLIMATE LEGISLATION IMPLICATIONS AND PROSPECTS: CHALLENGES FOR CANADA 14 (2009) (stating that in 2008, U.S. imports of energy-intensive manufactures from Canada totaled 47 billion U.S. dollars).

²³ Based on products scheduled to receive allowance rebates under the Waxman-Markey and Kerry-Lieberman bills. GARY HUFBAUER & JISUN KIM, CONFERENCE BD. OF CAN., U.S. CLIMATE LEGISLATION IMPLICATIONS AND PROSPECTS: CHALLENGES FOR CANADA 14 (Nov. 2009).

²⁴ See generally *id.* at 12-14, 17-19.

²⁵ See *id.* at Table 2.

to synchronize its policies with the United States. As a result, Canada has remained paralyzed on climate change, deferring action on the issue until the United States decides on its own policy course.²⁶

In the interim, Canada is slowly moving away from its previous climate change plan, *Turning the Corner*.²⁷ In its January 2010 Copenhagen submission, Canada pledged to reduce emissions 17% below 2005 levels by 2020—in contrast to *Turning the Corner*'s 20% by 2020 target—in line with the United States' Copenhagen promise and United States legislation currently on the table.²⁸ Canada further qualified its submission as “to be aligned with the final economy-wide emissions target of the United States in enacted legislation.”²⁹ Thus, the likelihood that Canada will act ahead of the United States is slim.

However, there is an additional variable in the Harper Administration's climate policy calculus: Bill C-311, a piece of legislation that passed the House of Commons in May 2010 and awaits a vote in the Senate as of the writing of this paper.³⁰ The Bill requires the Administration to develop a plan to reduce emissions by 25% below 1990 levels by 2020, or approximately 40% below 2005 levels.³¹ If the Bill passes the Senate—an outcome that is far from guaranteed, seeing as an identical bill failed in the Senate in 2008³²—Canada's current approach to climate change will clearly require significant revamping, although the Administration may strike a deal with the opposition in order to lower the targets. Even if the Bill does not pass, however, a close vote displaying political support for action on climate change could cause the Canadian government to re-think its wait-and-see approach.

²⁶ *Id.* at 13.

²⁷ See GOV'T OF CAN., *TURNING THE CORNER: TAKING ACTION TO FIGHT CLIMATE CHANGE* (2008), available at http://www.ec.gc.ca/doc/virage-corner/2008-03/pdf/572_eng.pdf.

²⁸ Compare *id.* at 2 and Letter from Michael Martin, Chief Negotiator & Ambassador for Climate Change, to Yvo de Boer, Exec. Sec'y United Nations Framework Convention on Climate Change, (Jan. 29, 2010), available at http://unfccc.int/files/meetings/application/pdf/canadacphaccord_app1.pdf (including “Canada's submission of its qualified economy-wide emissions target for 2020”) [hereinafter Copenhagen Letter].

²⁹ Copenhagen Letter, *supra* note 28, at Appendix I.

³⁰ An Act to ensure Canada assumes responsibilities in preventing dangerous climate change, C-311, 40th Parliament (2nd Sess. 2009).

³¹ *Id.*

³² Bill C-377 was the predecessor to Bill C-311. See *Status of the Bill: C-377*, LEGISINFO, <http://www2.parl.gc.ca/Sites/LOP/LEGISINFO/index.asp?Language=E&Chamber=N&StartList=A&EndList=Z&Session=14&Type=0&Scope=1&query=4868&List=stat> (last visited Jan. 1, 2011). See also Gloria Galloway, *Tory senators kill climate bill passed by House*, GLOBE & MAIL (Nov. 17, 2010, 10:56 AM), <http://www.theglobeandmail.com/news/politics/ottawa-notebook/tory-senators-kill-climate-bill-passed-by-house/article1802519/> (stating that the Senate voted against Bill C-311 on Nov. 16, 2010).

United States Policy

To date, the United States climate policy has largely been pursued by individual states, many following precedents of performance standards set by California.³³ Thirty states adopted a renewable portfolio standard,³⁴ and seventeen states committed to adopting automobile emissions standards that would produce fuel economy improvements in excess of federal regulation.³⁵ Many states also implemented energy efficiency measures.³⁶

With the entrance of the Obama administration, this dynamic appeared to have changed. The administration has directed the National Highway Transportation Safety Authority to raise fuel economy standards to California levels³⁷ and issued an endangerment finding for carbon dioxide.³⁸ Most importantly, a cap-and-trade bill, the American Clean Energy and Security Act (ACES), passed the House of Representatives,³⁹ and a similar bill, the American Power Act, was introduced in the Senate.⁴⁰

Since then, however, the United States has failed to pass meaningful legislation at the federal level. The Senate progressively watered down climate change proposals, until Majority Leader Harry Reid finally announced on July 22, 2010 that no comprehensive measure to address climate change would be addressed before the August recess—not even a renewable portfolio standard, which many had expected would be brought to the floor.⁴¹ With the death of comprehensive climate change legislation in the Senate, United States climate policy for the near future turns to the states and to the EPA, both of which have led thus far.⁴² Below, this paper details state and provincial initiatives on the table and examines their implications for Canada-United States integration. Next, the paper examines some hypothetical actions the EPA could take to reduce carbon emissions.

State and Provincial Legislation

States are developing and implementing several programs that may not be passed at the national level in the near term, including caps on industry and

³³ NAFTA AGENDA, *supra* note 20, at 3.

³⁴ *Id.*

³⁵ *Id.*

³⁶ *Id.*

³⁷ *Id.* at 4.

³⁸ *Id.*

³⁹ American Clean Energy and Security Act of 2009, H.R. 2454, 111th Cong. (2009) [hereinafter ACES].

⁴⁰ Clean Energy Jobs and American Power Act, S. 1733, 111th Cong. (2009).

⁴¹ See Carl Hulse & David M. Herszenhorn, *Democrats Call Off Effort For Climate Bill in Senate*, N.Y. TIMES, July 23, 2010, at A15.

⁴² See generally NAFTA AGENDA, *supra* note 20.

transportation emissions, renewable portfolio standards, and low-carbon fuel standards. If lawmakers are able to put into action all of the state initiatives currently on the table, coverage of these programs will be extended to the greater part of the United States, including the industry-heavy Midwest. These initiatives could be significant—PointCarbon estimates that the RGGI and a scaled-down WCI could meet up to 41% of the United States' Copenhagen target and a quarter of Canada's Copenhagen target.⁴³ Another study by the World Resources Institute shows that state programs combined with EPA regulation could reduce emissions 12% below 2005 levels by 2020.⁴⁴ Below, this paper explains some of these policies in detail.

Cap-and-Trade

The Regional Greenhouse Gas Initiative (RGGI) is the only multi-state cap-and-trade system with mandatory emissions caps currently in force in the United States.⁴⁵ Members include Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont.⁴⁶ The program initially covers only electric power generators—about 95% of the electricity sector falls under the cap-and-trade regime—but coverage may expand later to other sectors such as transportation.⁴⁷ The goal of the cap-and-trade system is to stabilize emissions from 2009 to 2014 and reduce emissions by 2.5% per year between 2015 and 2018, for a total decline in emissions of 10% by 2018.⁴⁸

The Western Climate Initiative (WCI) is an agreement among California, Montana, New Mexico, Oregon, Washington, British Columbia, Manitoba, Quebec, and Ontario to reduce emissions 15% below 2005 levels by 2020.⁴⁹ Unlike the RGGI, the WCI envisions an economy-wide cap by 2015.⁵⁰ Cali-

⁴³ CARBON MARKET RESEARCH NORTH AMERICA, PLAN B – GOING IT ALONE: REGIONAL PROGRAMS IN NORTH AMERICA (2010), *available at* <http://www.pointcarbon.com/research/cmana/cmana/1.1416963>.

⁴⁴ NICHOLAS M. BIANCO & FRANZ T. LITZ, WORLD RESOURCES INST., REDUCING GREENHOUSE GAS EMISSIONS IN THE UNITED STATES USING EXISTING FEDERAL AUTHORITIES AND STATE ACTION 3 (2010), *available at* http://pdf.wri.org/reducing_ghgs_using_existing_federal_authorities_and_state_action.pdf.

⁴⁵ REGIONAL GREENHOUSE GAS INITIATIVE, INC., FACT SHEET, *available at* http://www.rggi.org/docs/RGGI_Fact_Sheet.pdf.

⁴⁶ *Id.*

⁴⁷ *Id.*

⁴⁸ *Id.*

⁴⁹ WESTERN CLIMATE INITIATIVE, DESIGN RECOMMENDATIONS FOR THE WCI REGIONAL CAP-AND-TRADE PROGRAM 15, app. C, p. 1 (2008).

⁵⁰ *Id.*

ifornia has led states on implementation, publishing a draft regulation under Assembly Bill 32 in 2009.⁵¹

However, other states including Oregon, Washington, and Montana are unlikely to be able to implement a cap-and-trade program by the WCI start deadline of 2012.⁵² The New Mexico environmental department, faced with opposition in the state legislature, is attempting to formulate resolutions under existing state law.⁵³ Even California's law is subject to a ballot measure in November 2010 that could suspend it until unemployment reaches 5.5%—which is not likely to happen in the near future.⁵⁴ Republican gubernatorial candidate Meg Whitman also supports postponing implementation until 2013.⁵⁵

Despite these possible setbacks, the WCI is likely to have a far larger geographic scope than the RGGI. Whereas the RGGI trading program is confined to the northeastern part of the United States, with Canadian observers, the WCI trading system involves both U.S. states and Canadian provinces, with Mexican observers.⁵⁶ Further, the WCI allows carbon offsets to come from anywhere in North America, whereas RGGI offsets must come from within the RGGI region.⁵⁷

Renewable Portfolio Standards

The most common local measure implemented in North America, the renewable portfolio standard, is a requirement that covered utilities supply a certain percentage of electricity from renewable sources.⁵⁸ As of 2007, 31% of United States retail electricity sales were covered by a mandatory renewable standard.⁵⁹ Although the renewable energy requirement is the most common measure discussed in this paper, measures differ widely across the continent. The most obvious area of divergence is the target percentage of renewable energy to be achieved by a certain date; arguably the least strin-

⁵¹ Press Release, Office of the Governor of California, Gov. Schwarzenegger Signs Landmark Legislation to Reduce Greenhouse Gas Emissions (Sept. 27, 2006).

⁵² NAFTA AGENDA, *supra* note 20, at 6.

⁵³ *Id.*

⁵⁴ *Id.*

⁵⁵ *Id.*

⁵⁶ REGIONAL GREENHOUSE GAS INITIATIVE, *supra* note 45; WESTERN CLIMATE INITIATIVE, *supra* note 49.

⁵⁷ See generally REGIONAL GREENHOUSE GAS INITIATIVE, *supra* note 45 and WESTERN CLIMATE INITIATIVE, *supra* note 49; see also NAFTA AGENDA, *supra* note 20, at 6.

⁵⁸ *States with Renewable Portfolio Standards*, U.S. DEPARTMENT ENERGY http://apps1.eere.energy.gov/states/maps/renewable_portfolio_states.cfm (last updated June 16, 2009).

⁵⁹ WISER & BARBOSE, *supra* note 14, at 5.

gent target, belonging to Texas, is 5% by 2015, whereas California's target is 33% by 2020.⁶⁰

Other areas of divergence, however, are significant for North American cooperation. In particular, rules regarding eligibility of various sources of electricity, recognition of other states' renewable electricity, and recognition of other states' renewable electricity credits (RECs) vary widely across the continent.⁶¹ Varying definitions of renewable energy limit the fungibility of renewable energy markets, as renewable electricity certified in one state might not be able to be sold to another state in order to comply with the second state's standard.⁶² Despite definitions of renewable energy that differ from state to state, many state laws do not clarify which out-of-state RECs can be used to count toward RPS compliance and which cannot.⁶³ In addition, the systems that certify and manage renewable electricity credits are highly regionalized.⁶⁴

Fuel Standards

Executive Order S-01-07 instructs the California Air Resources Board to develop and implement a low carbon fuel standard (LCFS) that reduces the average carbon intensity of passenger vehicle fuels by 10% between 2010 and 2020.⁶⁵ The standard must be in place by 2010.⁶⁶ In order to comply, firms may blend or sell an increasing amount of low-carbon fuels or purchase credits from fuel providers that have exceeded the standard.⁶⁷ Firms may also bank credits for use at a later date.⁶⁸ A set of draft regulations requiring source-to-wheel life-cycle analysis to determine GHG content was released in October 2008,⁶⁹ and revisions were released in January 2009.⁷⁰ Because

⁶⁰ *Id.* at 3-4.

⁶¹ *See generally id.*

⁶² *Id.* at 26.

⁶³ EDWARD A. HOLT & RYAN H. WISER, ERNST ORLANDO LAWRENCE BERKELEY NAT'L LAB., THE TREATMENT OF RENEWABLE ENERGY CERTIFICATES, EMISSIONS ALLOWANCES, AND GREEN POWER PROGRAMS IN STATE RENEWABLES PORTFOLIO STANDARDS 10-12 (2007), *available at* <http://eetd.lbl.gov/ca/emp/reports/62574.pdf>.

⁶⁴ *Id.* at 4.

⁶⁵ Cal. Exec. Order No. S-01-07 (Jan. 18, 2007).

⁶⁶ *Id.*

⁶⁷ *Id.*

⁶⁸ *Id.*

⁶⁹ CAL. AIR RESOURCES BD., PRELIMINARY DRAFT STAFF PROPOSAL: RECOMMENDED APPROACHES FOR SETTING INTERIM SIGNIFICANT THRESHOLDS FOR GREENHOUSE GASSES UNDER THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (2008), *available at* <http://www.arb.ca.gov/cc/localgov/ceqa/meetings/102708/prelimdraftproposal102408.pdf>.

⁷⁰ BRENT D. YACOBucci & KELSIE BRACMORT, CONG. RESEARCH SERVICE, R40460, CALCULATION OF LIFE CYCLE GREENHOUSE GAS EMISSIONS FOR THE RENEWABLE FUEL STANDARD 2 (2010), *available at* <http://ncseonline.org/NLE/CRSreports/10Apr/R40460.pdf>.

the regulations ratchet down allowable average GHG content starting in 2011, new technologies must be implemented immediately in order to meet the standard.

Although California is the only state currently implementing an LCFS,⁷¹ Ontario, British Columbia, and the RGGI region have committed to adopting the standard,⁷² and others have shown interest in joining them.⁷³ WCI members including Oregon, Washington, Arizona, and New Mexico are considering adopting an LCFS,⁷⁴ and the Midwest Accord steering committee has discussed incorporating one into its program.⁷⁵ If widely adopted, the LCFS could constrain imports from Canadian oil sands and encourage greater production of sugarcane, soy, and cellulosic ethanol and biodiesel. President Obama has called for a national LCFS,⁷⁶ but the provision was dropped from the American Clean Energy and Security Act.⁷⁷

⁷¹ DAVID CRANE & BRIAN PRUSNEK, THE ROLE OF A LOW CARBON FUEL STANDARD IN REDUCING GREENHOUSE GAS EMISSIONS AND PROTECTING OUR ECONOMY (2007), available at <http://gov.ca.gov/index.php?/fact-sheet/5155/>.

⁷² *Eleven States to Adopt California's Low Carbon Fuel Standard*, ENVTL. LEADER (Jan. 4, 2010), <http://www.environmentalleader.com/2010/01/04/11-states-to-adopt-californias-low-carbon-fuel-standard/>.

⁷³ CRANE & PRUSNEK, *supra* note 71.

⁷⁴ *Oregon Low Carbon Fuel Standard*, PEW CENTER, <http://www.pewclimate.org/node/6869> (last visited Jan. 6, 2011) ("On July 22, 2009, Oregon Governor Ted Kulongowski signed into law H.B. 2186, which allows the Oregon Environmental Quality Commission (EQC) to adopt . . . a low carbon fuel standard, which would require a reduction in fuel carbon intensity of ten percent from 2010 levels by 2020."); *Low Carbon Fuel Standards*, DEP'T OF ECOLOGY, STATE OF WASH., <http://www.ecy.wa.gov/climatechange/fuelstandards.htm> (last visited Jan. 6, 2011) ("In May 2009, Governor Christine Gregoire issued Executive Order (E.O.) 09-05 Washington's Leadership on Climate Change . . . which directs the Washington Department of Ecology . . . to assess whether the California Low Carbon Fuel Standard (LCFS) or a modification thereof would best meet Washington's greenhouse gas emissions reduction targets."); *Arizona*, U.S. ENVTL. PROTECTION AGENCY, <http://www.epa.gov/statelocalclimate/state/tracking/individual/az.html> (last visited Jan. 6, 2011) ("HB 2776 (introduced February 2008) would provide conditional authority to the Arizona Department of Environmental Quality to adopt rules regarding low carbon fuel standards."); Stephen P. Holland et. al., *Greenhouse Gas Reductions Under Low Carbon Fuel Standards?*, 1 AM. ECON. J., 106, 107 n.4 (2009), available at <http://pubs.aeaweb.org/doi/pdfplus/10.1257/pol.1.1.106> (stating that many states have proposed adopting low carbon fuel standards including New Mexico).

⁷⁵ *Low Carbon Fuel Policy*, MIDWESTERN GOVERNORS ASS'N (2010), <http://www.midwesterngovernors.org/lcfs.htm>.

⁷⁶ Press Release, White House: Office of the Press Sec'y, President Obama Announces Steps to Support Sustainable Energy Options, Departments of Agriculture and Energy, Environmental Protection Agency to Lead Efforts (May 5, 2009), available at http://www.whitehouse.gov/the_press_office/President-Obama-Announces-Steps-to-Support-Sustainable-Energy-Options/.

⁷⁷ See generally American Clean Energy and Security Act, H.R. 2454, 111th Cong. (1st Sess. Mar. 31, 2009).

Implications for North American Trade and Cooperation

Carbon Market Integration

State and provincial cap-and-trade programs are by nature bilateral. The RGGI contains several Canadian observers, including Quebec, Ontario, and the Eastern Canadian Provinces, that could potentially join the program later on.⁷⁸ Four Canadian provinces are scheduled to participate in the WCI—British Columbia, Manitoba, Ontario, and Quebec—and Saskatchewan is an observer.⁷⁹

The WCI is open to participation from any North American jurisdiction, in one of several capacities.⁸⁰ Any jurisdiction may join the Initiative so long as it adopts the same emissions reduction commitments—15% by 2020.⁸¹ The WCI also permits allowances from other cap-and-trade programs to be sold within the region, although the combined total of outside allowances and offsets is restricted to no more than 49% of emissions reductions.⁸² The standards for sale of outside emissions allowances to the WCI are as yet unclear.

Although the RGGI limits offsets to those produced within the RGGI region,⁸³ WCI offsets may come from anywhere within North America and may comprise up to 49% of emissions reductions.⁸⁴ The WCI design recommendations require WCI partners to set stringent standards for monitoring, reporting, and verifying offsets.⁸⁵

Renewable Electricity Trade

Canada derives about 60% of its electricity from hydropower,⁸⁶ some of which may be sold to the United States to meet renewable electricity pro-

⁷⁸ Timothy P. Duane, *Greening the Grid: Implementing Climate Change Policy Through Energy Efficiency, Renewable Portfolio Standards, and Strategic Transmission System Investments*, 34 VT. L. REV. 711, 732 (2010).

⁷⁹ WESTERN CLIMATE INITIATIVE, *supra* note 49.

⁸⁰ *Id.* at 13.

⁸¹ *Id.*

⁸² *Id.* at 10.

⁸³ REVISITING THE NAFTA AGENDA, *supra* note 22, at 6; *see also* CO₂ Offsets, REGIONAL GREENHOUSE GAS INITIATIVE, <http://www.rggi.org/market/offsets> (last visited Jan. 6, 2011) (“At this time, the RGGI participating states limit the award of offset allowances to five project categories, each of which is designed to reduce or sequester emissions of carbon dioxide (CO₂), methane (CH₄), or sulfur hexafluoride (SF₆) within the 10-state region.”) (emphasis added).

⁸⁴ WESTERN CLIMATE INITIATIVE, *supra* note 49, at 10.

⁸⁵ *Id.* at 43.

⁸⁶ REVISITING THE NAFTA AGENDA, *supra* note 22, at 8.

curement goals.⁸⁷ In addition to direct transmission, many states allow utilities to buy tradable renewable energy credits (RECs) for renewable electricity generated outside the state, even if the electricity itself is not actually delivered to the state, although RECs must be certified by various regional tracking systems.⁸⁸

Hydropower transmitted from Canada can also help United States border states meet renewable portfolio standard requirements.⁸⁹ In order for hydropower to qualify as renewable electricity under any of the various statutes, however, it must meet standards for capacity, additionality, and environmental quality.⁹⁰ In verifying compliance with these standards, inclusion of Canadian hydropower as a qualifying renewable source poses regulatory difficulties.

Most border states exclude large hydropower from qualifying as renewable electricity, a point that is highly contentious among United States and Canadian governments.⁹¹ Hydro Quebec has been a vocal advocate for including large-scale hydropower in state standards, arguing in New York State discussions⁹² and preparing a submission to the NAFTA Commission for Environmental Cooperation (CEC).⁹³ Manitoba Hydro and the state of Minnesota have also clashed over the definition of hydropower in state standards.⁹⁴

Many states, however, allow small hydropower and other renewable resources generated out of state to qualify under their renewable standards. These include major buyers of Canadian electricity such as California, Minnesota, and New York.⁹⁵ Usually, in order to qualify, either the electricity must be delivered into the state, or the renewable electricity credits (RECs) corresponding to the electricity must be registered with the regional tracking system corresponding to the state.⁹⁶ Due to the high volume of electricity transmission between Canada and key border states—approximately 7% of the electricity generated in Canada is sold to the United States—state renew-

⁸⁷ *Id.*

⁸⁸ *Id.*

⁸⁹ *Id.*

⁹⁰ *Id.*

⁹¹ *Id.* at 9.

⁹² *Id.*

⁹³ *Id.*

⁹⁴ *Id.*; Ian H. Rowlands, *Renewable Electricity Policies across Borders*, in *CHANGING CLIMATES IN NORTH AMERICAN POLITICS* 187 (Hendrik Selin & Stacy D. VanDeveer, eds., 2009).

⁹⁵ See Lynn M. Fountain, *Johnny-Come-Lately: Practical Considerations of a National RPS*, 42 CONN. L. REV. 1475, 1482 (2010); U.S. ENVTL. PROTECTION AGENCY, *ENERGY PORTFOLIO STANDARDS AND THE PROMOTION OF COMBINED HEAT AND POWER* 4-6 (2009), available at http://www.epa.gov/chp/documents/eps_and_promotion.pdf.

⁹⁶ Fountain, *supra* note 95, at n.29-30.

able portfolio standards constitute a significant opportunity for Canada to develop and export additional clean energy.⁹⁷

Fuel Standards

Canada is the leading supplier of oil to the United States market: United States imports of Canadian crude oil and refined products in 2008 totaled 2.5 million barrels per day (mmb/d) out of a total Canadian production of 3.4 million bbl/d.⁹⁸ Oil sands production accounted for about half of Canada's total crude oil and almost two thirds of Alberta's crude oil production,⁹⁹ and over 95% of Canada's oil reserves are in the oil sands of Alberta.¹⁰⁰

The LCFS will constrain oil sands imports into jurisdictions that adopt it.¹⁰¹ Oil sands production generates 15-20% more GHG emissions on a well-to-wheel basis than conventional oil.¹⁰² This puts it at a disadvantage to conventional oil and other fuels under the standard, particularly as the cost of producing from the oil sands is already relatively expensive compared to "conventional" crudes.¹⁰³ Oil sands operations could lower their carbon footprint to that of conventional fuels by using carbon capture and storage technology, but the technology has not been yet developed at commercial scale and could prove to be an expensive option.¹⁰⁴

⁹⁷ See generally CAN. ELECTRICITY ASS'N, *THE INTEGRATED ELECTRICITY SYSTEM: SUSTAINABLE ELECTRICITY AS THE FOUNDATION FOR ECONOMIC RECOVERY IN NORTH AMERICA* 10 (2010), available at http://www.electricity.ca/media/pdfs/economic/canada_us_affairs/CEA_Enhancing_2010_final.pdf (showing energy exports and imports between Canada and the United States).

⁹⁸ Canada, U.S. ENERGY INFO. ADMIN. (July 2009), <http://www.eia.doe.gov/cabs/canada/Oil.html>.

⁹⁹ *Id.*; see also GOV'T OF ALTA., *ALBERTA OIL SANDS INDUSTRY 2* (2010), available at http://www.albertacanada.com/documents/AOSID_QuarterlyUpdate_Spring2010.pdf (indicating that 170 billion of Alberta's 179 billion barrels of oil have the special quality of being bitumen, i.e., oil sands oil).

¹⁰⁰ Canada, *supra* note 98.

¹⁰¹ See J. Scott Childs, *Continental Cap-and-Trade: Canada, the United States, and Climate Change Partnership in North America*, 32 HOUS. J. INT'L L. 393, 438 (2010) (indicating oil sands oil industry is significantly impacted by Low-Carbon Fuel Standards).

¹⁰² MICHAEL TOMAN ET. AL., RAND CORP., *UNCONVENTIONAL FOSSIL-BASED FUELS: ECONOMIC AND ENVIRONMENTAL TRADE-OFFS* 27 (2008), available at http://www.rand.org/pubs/technical_reports/2008/RAND_TR580.pdf.

¹⁰³ Childs, *supra* note 101, at 406; James Bixby, *The 2005 Energy Policy Act: Lesson on Getting Alternative Fuels to the Pump in Minnesota*, 26 WASH. U. J.L. & POL'Y 353, 354 n.8 (2008) (indicating oil sands oil is expensive to produce).

¹⁰⁴ See Childs, *supra* note 101, at 410 (indicating that, while Carbon Capture and Sequestration may prove to be a good solution in the future, it has yet to be used on wide-scale basis and continues to be very expensive).

Currently, the Midwestern (PADD II) region of the United States purchases 75% of the unconventional crude exported from Canada.¹⁰⁵ Only a small percentage goes to California and other states that have committed to the LCFS.¹⁰⁶ As a result, the LCFS at this time is unlikely to have a significant deterrent effect on oil sands production, although this could change if the standard is adopted by Midwestern, Rocky Mountain, or Gulf Coast states.

Possibilities for EPA Regulation

A week after the Senate abandoned hope of passing climate change legislation in 2010, the EPA issued a report affirming that greenhouse gases threatened human health and welfare, declaring in a press release that “climate science is credible, compelling and growing stronger.”¹⁰⁷ The Supreme Court ruled in 2007 that the Clean Air Act requires the EPA to regulate pollutants that they find endanger human health and welfare.¹⁰⁸

Shortly afterward, the EPA issued a proposed regulation requiring large new emissions sources and capacity additions to existing sources to obtain permits under its New Source Review program.¹⁰⁹ The permits will require these emitters to adopt the best available emissions control technologies

¹⁰⁵ MARC HUMPHRIES, CONG. RESEARCH SERVICE, RL34258, NORTH AMERICAN OIL SANDS: HISTORY OF DEVELOPMENT, PROSPECTS FOR THE FUTURE 19 (2007), *available at* <http://www.au.af.mil/au/awc/awcgate/crs/rl34258.pdf>; *see also* NAT’L ENERGY BD., CANADA’S ENERGY FUTURE: INFRASTRUCTURE CHANGES AND CHALLENGES TO 2020, at 10 (2009), *available at* <http://www.neb-one.gc.ca/clf-nsi/rnrgynfmrtn/rngyrprt/rngyfr/2009/nfrstrctrchnghllng2010/nfrstrctrchnghllng2010-eng.pdf> (“The U.S. Midwest (PADD II) is Canada’s largest market for crude oil, followed by the Rocky Mountain region (PADD IV), the U.S. northeast (PADD I), the U.S. west coast (PADD V) and the U.S. Gulf Coast (PADD III).”).

¹⁰⁶ *See* Mike DeSouza, *Climate plan spares oilsands, Baird told California policies in line with Canadian goals*, MONTREAL GAZETTE (Dec. 6, 2010), <http://www.montrealgazette.com/business/Climate+plan+spares+oilsands+Baird+told/3932452/story.html> (“The LCFS is expected to have a negligible impact on the Canadian oil industry, as Canadian crude oil imports account for less than two per cent of California’s crude oil imports”); *see also* MOREY BURNHAM, EARTHWORKS, TRACKING TAR SANDS CRUDES RESEARCH NOTE 1: CANADIAN CRUDE OIL IMPORTS TO U.S. REFINERIES, 5, 10-11 (2010), *available at* http://earthworksaction.org/pubs/GulfCoastRefineries_ResearchNote1.pdf (indicating California imports only nine million barrels of oil sands oil and that the majority of California refineries do not import oil sands oil).

¹⁰⁷ Press Release, Environmental Protection Agency, EPA Rejects Claims of Flawed Climate Science (July 29, 2010) (on file with author).

¹⁰⁸ *Massachusetts v. Environmental Protection Agency*, 549 U.S. 497 (2007).

¹⁰⁹ ENVTL. PROTECTION AGENCY, PROPOSED RULES ON CLEAN AIR ACT PERMITS FOR SOURCES OF GREENHOUSE GAS EMISSIONS UNDER THE PREVENTION OF SIGNIFICANT DETERIORATION PROGRAM: FACT SHEET 1-2 (2010), *available at* <http://www.epa.gov/NSR/documents/20100810SIPFIPFactSheet.pdf>.

(BACTs).¹¹⁰ The EPA has not yet defined what the best available technologies for greenhouse gas reduction are.¹¹¹

The World Resources Institute has published a report detailing three different potential EPA regulation scenarios: “Lackluster,” “Middle-of-the-road,” and “Go-Getter.”¹¹² Possible regulations for manufacturing and power plants include efficiency and emissions requirements for power plants.¹¹³ The “go-getter” scenario also includes the implementation of a cap-and-trade program under the Clean Air Act to achieve the reductions expected under proposed federal regulation.¹¹⁴ The report suggests tighter appliance efficiency standards, as well as CAFE standards of fifty miles per gallon by 2030 in the “middle-of-the-road” scenario and sixty-three miles per gallon in the “go-getter” scenario.¹¹⁵

Whereas it is technically feasible for the federal government to implement the “go-getter” regulations described above, Congressional politics could constrain the executive branch’s ability to act. In June, Congress rejected a resolution sponsored by Sen. Lisa Murkowski (R-AK) that would have preempted the EPA from regulating greenhouse gases at all,¹¹⁶ and a similar proposal by Sen. Jay Rockefeller (D-WV) to delay EPA action for two years is expected to be blocked for now.¹¹⁷ Legal challenges are still in the preliminary stage, and their outcomes are uncertain.

For now, the EPA has room to deal with climate change. A Republican Congress, however, would be likely to block EPA regulation under the Clean Air Act, particularly if its actions too closely approximate the scale or methods of the cap-and-trade bills that the party leadership has successfully demonized.¹¹⁸ Most of the actions suggested by the WRI would have been

¹¹⁰ *Id.* at 4.

¹¹¹ *See generally id.*

¹¹² BIANCO & LITZ, *supra* note 44, at 1.

¹¹³ *Id.* at 10-11.

¹¹⁴ *Id.* at 11, 18-19.

¹¹⁵ *Id.* at 28-30, 32.

¹¹⁶ A joint resolution disapproving a rule submitted by the Environmental Protection Agency relating to the endangerment finding and the cause or contribute findings for greenhouse gases under section 202(a) of the Clean Air Act, S.J. Res. 26, 111th Cong. (2010); *see also* 156 Cong. Rec. S4836 (daily ed. June 10, 2010) (vote to reject resolution).

¹¹⁷ Whereas the Murkowski amendment would prevent the EPA from regulating greenhouse gases, the Rockefeller amendment is limited to stationary sources. *See* The Stationary Source Regulations Delay Act, S. 3072, 111th Cong. (2010) [hereinafter Rockefeller Amendment].

¹¹⁸ *See generally* Sheryl Gay Stolberg, *The Teary, Busy, Ugly Lame Duck Congress*, N.Y. TIMES, Dec. 18, 2010, at WK1 (“Senator Mike Johanns, a Nebraska Republican, sought earlier this year to bar a lame-duck Congress from creating the energy emissions exchange known as cap and trade—favored by Democrats but anathema to Republicans—but his plan never got a vote.”).

preempted by the Rockefeller proposal, and many require the EPA to set up a cap-and-trade program on its own.¹¹⁹

Nevertheless, it is not unreasonable to expect the “lackluster” actions and some of the “middle-of-the-road” and “go-getter” actions to be implemented. Since vehicle fuel economy standards have historically fallen under the purview of the executive branch, it could be feasible for the EPA and Department of Transportation to adopt “middle-of-the-road” or “go-getter” vehicle standards, and strong appliance standards also might not be overly controversial. However, for power plants—the largest emissions source by far¹²⁰—it is difficult to see the EPA adopting a go-getter approach.

Regulation via the executive branch sidesteps many of the international coordination issues inherent to market-based policies. Unlike Congress, the Environmental Protection Agency is unlikely to allow polluters to avoid commitments by purchasing offsets from abroad. Because utility pollution will likely be regulated through emissions standards rather than through a market-based renewable portfolio standard, issues regarding definitions of “renewable” are moot at the federal level.

Being on a smaller scale—and being controlled by the executive branch, which is less beholden to localized constituencies than the legislative branch—EPA regulation is unlikely to carry with it the same kinds of competitiveness provisions that were central to the Waxman-Markey and Kerry-Lieberman bills. Importers of goods and services will not have to purchase international allowances at the border. Likewise, the special treatment for trade-intensive manufacturing industries that had been included in the cap-and-trade bills attempted by Congress¹²¹ is less likely to appear within command-and-control regulation.

On the surface, it would thus seem that Canadians have less to worry about in terms of disruption of international trade under EPA regulation than under a cap-and-trade bill.¹²² However, they will also miss out on significant benefits that market-based mechanisms would have provided.¹²³ If Canada chooses to fulfill its Copenhagen commitment, the task of reducing emissions

¹¹⁹ Compare BIANCO & LITZ, *supra* note 44, with Rockefeller Amendment, *supra* note 117.

¹²⁰ BIANCO & LITZ, *supra* note 44, at 4-5, 10.

¹²¹ See, e.g., S. 280, 110th Cong. (2010); S. 309, 110th Cong. (2010); S. 317, 110th Cong. (2010); S. 485, 110th Cong. (2010); S. 3036, 110th Cong. (2010); S. 2191, 110th Cong. (2010); H.R. 620, 110th Cong. (2010); H.R. 1590, 110th Cong. (2010); H.R. 4226, 110th Cong. (2010); H.R. 6186, 110th Cong. (2010); H.R. 6316, 110th Cong. (2010).

¹²² Though the border measures proposed in the Waxman-Markey and Kerry-Lieberman bills caused much consternation among United States trading partners, it is highly unlikely that Canada would have been subject to them. See NAFTA AGENDA, *supra* note 20, at 7.

¹²³ HUFBAUER & KIM, *supra* note 22, at 2, 12.

will become much more difficult and expensive without the option of trading allowances with the United States.¹²⁴

This is because it will likely cost more for Canada to reduce GHG emissions reductions than the United States. The United States Energy Information Administration (EIA) projects that Canada's carbon dioxide emissions will grow at 0.8% per year between 2006 and 2030, under business as usual conditions.¹²⁵ In contrast, United States emissions are projected to grow by only 0.3% per year.¹²⁶ Canada is also projected to have the highest carbon dioxide intensity among the OECD countries in 2030 under business as usual: 359 metric tons per million dollars of GDP.¹²⁷ U.S. carbon dioxide intensity in 2030 is projected to be 282 metric tons per million dollars of GDP.¹²⁸ The difference in projected GHG emissions growth is largely due to the projected growth of emissions from Alberta's oil sands.¹²⁹

In order to achieve the same percent change in greenhouse gas emissions as the United States, Canada would need to make greater reductions from business as usual levels. Bramley, Partington, and Sawyer estimate that absent allowance trading, the cost of emissions allowances in Canada will be twice as much as in the United States to achieve the same quantity of carbon emissions reductions.¹³⁰ Allowance trading with the United States would alleviate these cost pressures by lowering allowance prices to United States levels.¹³¹

Canada also loses the increased export market for its hydropower that a federal renewable portfolio standard would provide. Under the Waxman-Markey bill passed by the United States House of Representatives, United States utilities would likely have had the option of subtracting imported Canadian hydropower from their baseline generation amounts, against which compliance with the renewable standard would have been judged.¹³² Canadian hydropower might also have counted as renewable itself, although certification issues would likely need to be worked out with the United States gov-

¹²⁴ MATTHEW BRAMLEY ET. AL., PEMBINA INST., CLEAN ENERGY AND CLIMATE ACTION: A NORTH AMERICAN COLLABORATION 12 (2009), *available at* http://www.iisd.org/pdf/2009/linking_nat_cap_north_america.pdf ("Canada is very unlikely to meet its current national GHG target for 2020 under this outcome, because its carbon price would be lowered to the U.S. level, without any compensating import of allowances.").

¹²⁵ U.S. ENERGY INFO. ADMIN., INTERNATIONAL ENERGY OUTLOOK 112 (2009), *available at* <http://www.eia.doe.gov/oiaf/ieo/pdf/0484%282009%29.pdf> [hereinafter ENERGY OUTLOOK 2009].

¹²⁶ *Id.*

¹²⁷ *Id.* at 114

¹²⁸ *Id.*

¹²⁹ BRAMLEY ET. AL., *supra* note 124.

¹³⁰ *Id.* at 17.

¹³¹ *Id.*

¹³² ACES, *supra* note 39.

ernment. Both options to expand the market for its hydropower will be lost if the United States does not adopt a federal market-based renewable portfolio standard.

Conclusion and Policy Recommendations

Unfortunately, all but the most cursory climate change legislation appears to be stalled at the federal level in the United States and Canada. This might be perceived as a boon by some who are worried about the effect of these policies on certain narrow industries or on international trade relations more broadly. However, comprehensive, broad-based, and intelligently coordinated policies could have lowered the cost of reducing emissions in both countries. Instead, we are left with EPA regulation under a law that was not designed to deal with greenhouse gas emissions, and a patchwork of state and provincial laws. While these programs are a step forward on climate change, they are insufficient to comply with international commitments, much less reduce GHG concentrations to 450 parts per million, and they are a less efficient means of accomplishing these goals.

Nevertheless, this paper offers some modest steps that the two countries could take to coordinate these state and federal initiatives. The Commission for Environmental Cooperation, a body created by NAFTA's environmental side agreement, has already committed to improving the comparability of North American greenhouse gas emissions data.¹³³ With modest budgetary increments, it could play a significant role in NAFTA climate change initiatives by expanding its database on North American emissions and reporting on new climate initiatives and regulations in each country. By so doing, the CEC could assist in the monitoring, reporting, and verification of carbon credits issued under national or regional carbon regimes, which could lower transaction costs of offset projects among the three North American countries.

Somewhat more controversially, states and provinces may work toward coordinated renewable electricity policies. All parties should agree on how imported electricity should be credited and certified under renewable portfolio standards, both at the federal and state levels. To the extent feasible, states and provinces should harmonize definitions of renewable electricity in order to stimulate development by increasing the fungibility of RECs. Harmonization and expansion of renewable energy credit tracking systems could also widen the geographic area from which renewable credits could be purchased.

¹³³ *Mapping North American Environmental Issues*, CEC, http://www.cec.org/Page.asp?PageID=1225&ContentID=&SiteNodeID=586&BL_ExpandID= (last visited Jan. 7, 2011).

States and provinces are already discussing the possibility of mutual recognition of carbon credits generated by various regional cap-and-trade schemes,¹³⁴ and they should continue to study options for coordinating or integrating these evolving carbon regimes. Policy coordination could facilitate carbon credit trading by ensuring that carbon credits in all jurisdictions represent similar kinds of carbon reductions. In addition, greater coordination among carbon trading regimes could help address concerns regarding "carbon leakage" that have plagued the implementation of cap-and-trade programs in many states.¹³⁵

The North American countries should shield climate change taxes and regulations from claims under the indirect takings provisions of NAFTA Chapter 11. Chapter 11 requires governments to provide compensation to investors for measures that are "tantamount to expropriation."¹³⁶ To date, Chapter 11 cases have assumed a limited scope for environmental laws constituting expropriation.¹³⁷ Climate change laws will most likely have much broader economic effects than prior environmental legislation, and the scope of potential claims under NAFTA Chapter 11 due to climate change laws and regulations could be orders of magnitude greater than those filed in the past. The potential for such Chapter 11 litigation against climate change laws could slow the implementation of measures designed to mitigate GHG emissions and adversely flows of trade and investment in the region.

These measures would increase the efficiency of state and regional climate change regulations. However, they are no substitute for a comprehensive national approach to climate change in both countries. In order to ensure the best policy outcome, Obama and Harper should work toward a national cap-and-trade or carbon tax bill.

¹³⁴ See MATTHEW BRAMLEY ET. AL., *supra* note 124, at 9-10 (describing various regional carbon-trading systems, which include both provincial and state members).

¹³⁵ See *id.* at 7 (arguing that the states and provinces have a greater interest in linking than national governments because carbon leakage could be greater, when measured relative to total jurisdictional emissions, between neighboring states or provinces than between neighboring countries).

¹³⁶ North American Free Trade Agreement U.S.-Can.-Mex., art. 1110(1), Dec. 17, 1992, 107 Stat. 2057, 32 I.L.M. 289 (1993) [hereinafter NAFTA].

¹³⁷ Alberto R. Salazar, *NAFTA Chapter 11, Regulatory Expropriation, and Domestic Counter-Advertising Law*, 27 ARIZ. J. INT'L & COMP. L. 31, 40 ("the concept of 'a measure tantamount to expropriation' as set out in Article 1110 of NAFTA has been defined conservatively by recent tribunal decisions.").

CANADIAN SPEAKER

*Maureen Irish**

MS. IRISH: Good morning, everyone. It is a pleasure to be here. I have to say that, along with many other people here, we really miss Henry. I am glad to see the bell is there, and I am going to watch and make sure that I stop before I get the bell.

I am going to speak about regulatory convergence and the accompanying legal framework. Unfortunately, what I am arguing is that there are some issues in the legal framework that create problems as regulatory convergence is pursued. I am suggesting that regulatory convergence is very difficult when we do not have a convergence of governments.¹³⁸

First, I will speak about issues related to vocabulary. Then I will speak about what I believe to be a mutual recognition agreement that is already present in the North American Free Trade Agreement (NAFTA),¹³⁹ and then I am going to talk about the potential legal problems flowing from most favored nation (MFN) rights in the World Trade Organization (WTO).

First, concerning vocabulary, there are three approaches to consider: national treatment, harmonization, and recognition of equivalence. National treatment is the easiest one to apply: there is nothing to coordinate between governments. Imported goods simply meet the standards in the country of import, the host country, and simply need to receive treatment at least as favorable as that of domestically-produced goods.¹⁴⁰ That is very easy.

Harmonization of standards, however, is difficult to do. You have to negotiate, and it takes a lot to come to a uniform standard.

The recognition standard, recognition of equivalence, also requires ongoing coordination and negotiation. The imported goods do not have to meet the standards in the country of import, the host country, because the standards in the country of production or export are recognized as equivalent to

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¹³⁸ See generally Maureen Irish, *Regulatory Convergence, Security and Global Administrative Law in Canada-United States Trade*, 12 J. Int'l Econ. L. 333 (2009).

¹³⁹ NAFTA, *supra* note 136.

¹⁴⁰ *Id.* art. 301.

those standards. The home country standards are thus recognized as equivalent and, therefore, the imports can circulate freely in the country of import.

I am going to be talking about what I see as a framework of an existing mutual recognition agreement in NAFTA, and I will talk about the sanitary and phytosanitary (SPS) chapter¹⁴¹ and the technical barriers to trade (TBT) chapter.¹⁴² I will then move to similar provisions in the WTO. SPS provisions apply to standards having to do with the life and health of plants and animals, including humans. TBT applies to all other standards-related measures concerning goods.

In NAFTA, we already have significant encouragement for harmonization. First, in the SPS chapter, "(e)ach Party should . . . consider relevant . . . measures of the other Parties" when it is developing its own SPS standards.¹⁴³ In the TBT chapter, "the Parties shall, to the greatest extent practicable, make compatible their respective standards-related measures."¹⁴⁴ It is qualified, but the word there is "shall." In the definition section, Article 915, "make compatible" includes bringing standards-related measures "to a level such that they are either identical" (which would be harmonization) "equivalent or have the effect of permitting goods . . . to be used in place of one another or fulfill the same purpose."¹⁴⁵ "Make compatible" therefore includes harmonization and some recognition of equivalence. Within NAFTA, we already have this obligation towards harmonization.

We also have a significant obligation concerning equivalence in the SPS chapter. "Each importing Party . . . shall treat" an SPS measure of another NAFTA Party "as equivalent to its own" if the exporting Party demonstrates that the measure "achieves the importing Party's appropriate level of protection."¹⁴⁶ That is also a "shall" in this provision. The importing Party can refuse to recognize equivalence on a scientific basis. If it does so, on request, it shall provide written reasons.¹⁴⁷ Thus there is already an equivalence provision in NAFTA concerning SPS.

The same thing applies in the TBT chapter with respect to technical regulations. A technical regulation is a standard that is obligatory.¹⁴⁸ If the particular measure is not of mandatory obligation, then we just call it a standard.

¹⁴¹ *Id.* ch.7, sec. B.

¹⁴² *Id.* ch. 9.

¹⁴³ *Id.* art. 714(4).

¹⁴⁴ *Id.* art. 906(2).

¹⁴⁵ *Id.* art. 915.

¹⁴⁶ *Id.* art. 714(2).

¹⁴⁷ *Id.*

¹⁴⁸ *Id.* art. 915 (defining a technical regulation as "a document which lays down goods characteristics or their related processes and production methods, or services characteristics or their related operating methods, including the applicable administrative provisions, with which compliance is mandatory.").

But a technical regulation is something that applies to goods in a mandatory way. In the TBT chapter, “(e)ach importing Party shall treat a technical regulation” of the exporting Party as equivalent if the exporting Party, once again, demonstrates that that technical regulation “adequately fulfills the importing Party’s legitimate objectives.”¹⁴⁹ The importing Party can refuse to recognize equivalence. But, once again, if it does so, on request, it must provide written reasons.¹⁵⁰ Thus there is already, in NAFTA, I think, the framework for an existing mutual recognition agreement (MRA).

I am moving now to the comparable position in the WTO in the SPS agreement, and the TBT agreement at the WTO.

The provision concerning the SPS agreement at the WTO is actually fairly comparable to the NAFTA provision. In the SPS agreement, a Member “shall accept the sanitary or phytosanitary measures of other Members as equivalent . . . if the exporting Member objectively demonstrates . . . that its measures achieve the importing Member’s appropriate level of sanitary or phytosanitary protection.”¹⁵¹ The main difference here between this and NAFTA is that we do not have the same procedural rights. Nothing says that if the importing Member refuses to recognize, then, on request, it must give written reasons. Nevertheless, the active word in Article 4.1 is “shall.” This is an obligation. There is, as well, within the SPS agreement a tendency towards the encouragement of MRAs: “Members shall, upon request, enter into consultations with the aim of achieving bilateral and multilateral agreements on recognition of the equivalence of specified sanitary or phytosanitary measures.”¹⁵² This may be very specific rather than an overall MRA.

The rights concerning the TBT agreement at the WTO are significantly weaker. This agreement applies to all other standards. Concerning TBT, Members simply need to give positive consideration to accepting a technical regulation as equivalent, provided they are satisfied that it fulfills the objectives of their regulations.¹⁵³ Accordingly, this is weaker than the NAFTA obligation to recognize. The TBT agreement contains, however, encouragement toward the development of MRAs: “Members . . . are encouraged to

¹⁴⁹ *Id.* art. 906(4).

¹⁵⁰ *Id.* art. 906(5).

¹⁵¹ Agreement on the Application of Sanitary and Phytosanitary Measures art. 4.1, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 U.N.T.S. 493.

¹⁵² *Id.* art. 4.2 (“Members shall, upon request, enter into consultations with the aim of achieving bilateral and multilateral agreements on recognition of the equivalence of specified sanitary or phytosanitary measures.”).

¹⁵³ Agreement on Technical Barriers to Trade art. 2.7, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 U.N.T.S. 493.

enter, upon request, into consultations” for the development of such agreements.¹⁵⁴

Now, I am moving to the legal question I will raise. It is a bit of a challenge. My question has to do with the standard obligation in trade law of Most Favored Nation (“MFN”) treatment. GATT Article I says that “[a]ny advantage, favor, privilege, or immunity granted . . . to any product originating in” one country “shall be accorded immediately and unconditionally to the like product originating in” any of the other WTO Member countries.¹⁵⁵ Now, what does this mean concerning an MRA? The right for an import to circulate freely in the country of import without meeting the domestic standards there, surely has to be within the phrase “an advantage, favor, privilege, or immunity.” Surely there has to be something here that will come from having an MFN right. The question, really, is what exactly has to be accorded immediately or unconditionally to the products of other WTO members? What exactly is required in this MFN right?

Joel Trachtman, writing in the *Journal of International Economic Law* in 2003,¹⁵⁶ said that if a country failed to recognize a home country regulation that meets the goals of the importing country, then that would be de facto discrimination. He is assuming, I think, in the context of the article, the standard of the Cassis de Dijon decision in the European Community concerning a provision in the Treaty of Rome on measures equivalent to quantitative restrictions.¹⁵⁷ According to my interpretation of the Cassis de Dijon principle, any product lawfully produced or marketed in one member of the Community must have free access to other member countries of the Community unless it would harm legitimate interests in the importing state, such as public health or consumer protection.¹⁵⁸ Now, if that is the overriding principle, then MFN is a significant obligation.

¹⁵⁴ *Id.* art. 10.7.

¹⁵⁵ General Agreement on Tariffs and Trade, Oct. 30, 1947, 61 Stat. A-11, 55 U.N.T.S. 194 [hereinafter GATT].

¹⁵⁶ Joel P. Trachtman, *Toward Open Recognition? Standardization and Regional Integration Under Article XXIV of GATT*, 6 J. INT’L ECON. L. 459, 463 (2003).

¹⁵⁷ Case 120/78, *Rewe-Zentral AG v. Bundesmonopolverwaltung für Branntwein*, 1979 E.C.R. 649 (1979).

¹⁵⁸ René Joliet, *The Free Circulation of Goods: the Keck and Mithouard Decision and the New Directions in the Case Law*, 1 COLUM. J. EUR. L. 435, 438 (1995) (“Nevertheless, [member states] are not allowed to apply their legislation to goods legally produced and sold in other Member States, and therefore in compliance with different criteria, unless this is necessary to satisfy mandatory requirements relating to the efficiency of the tax system, protection of public health, fairness in commercial transactions, or consumer protection.”); see also Richard H. Steinberg, *Trade-Environment Negotiations in the EU, NAFTA, and GATT/WTO: State Power, Interests, and the Structure of Regime Solutions* 24 (Berkley Roundtable on Int’l Econ., Working Paper No. 75, 1995), available at <http://bric.berkeley.edu/publications/WP%2075.pdf>.

The idea that MFN would carry that much weight means that it would be difficult to negotiate a closed mutual recognition agreement. In fact, this means that any MRA should be seen as possibly open to other countries, provided their goods would not harm legitimate interests in the importing country, as Lorand Bartels argues in the *Journal of International Economic Law* in an article published in 2005.¹⁵⁹

There is thus significant scholarly discussion here to say that the MFN requirement has a fair bit of weight.

I cannot provide a résumé of all of the discussion, but I will mention four possibilities about what the MFN obligation might involve. The first one, which I have already talked about, is the Cassis de Dijon standard: goods being able to circulate lawfully in the importing country unless they harm legitimate interests there.

In a second possible approach, we might say that goods would be able to benefit from MFN treatment if there is a demonstration that the regulation in the exporting country meets the particular goals of the importing country. This is, I believe, the NAFTA standard that we just saw in the SPS and TBT provisions of NAFTA. That is possibly another way of looking at the MFN obligation.

In a third possible interpretation, we might say instead that the MFN obligation would come into play if the regulation of the exporting country is substantially the same as the regulation of the importing country. Here, I am not just looking at whether something actually meets the goal, but whether the regulation itself is substantially the same. It is not just, is the lumber strong?, but rather Is the lumber thick enough? Does the lumber have too many knots in it? In other words, does the regulation use the same regulating factor. This looks at things not just in terms of performance, but rather the design or descriptive characteristics of the standard. That is a third possibility.¹⁶⁰

If we use that third approach, there is jurisprudence to say that an MFN obligation could come into play. In 1981, Canada won a General Agreement on Tariffs and Trade (GATT) panel decision against the European Economic Community (ECC) because of Article I.¹⁶¹ The ECC was failing to recognize standards for beef. Canada argued that the ECC was accepting two United States standards, Prime and Choice, as indicating quality of the beef (because cattle had been fed for 100 days on high energy food, etc.) although the ECC had not accepted Canadian standards that Canada said provided the same

¹⁵⁹ See generally Lorand Bartels, *The Legality of the EC Mutual Recognition Clause under WTO Law*, 8 J. INT'L ECON. L. 691 (2005).

¹⁶⁰ See generally Report of the Panel, *European Economic Community – Imports of Beef from Canada Recourse to Article XXIII: 2 By Canada*, L/5099 (Mar. 10, 1981), GATT B.I.S.D. (28th Supp.) at 92 (1981).

¹⁶¹ *Id.*

kind of assurance. At the time, the United States was accepting those Canadian standards as meeting the requirements for United States Prime or United States Choice goods. The United States was accepting those standards, but the ECC was not. The standards were substantially the same, and Canada won the GATT dispute. It was held by the panel that the ECC was in fact breaching Canada's MFN rights.¹⁶² We thus have one GATT panel decision confirming the operation of MFN on that interpretation for recognition of standards.

There is a fourth question about what would be involved in according the same right immediately and unconditionally as a right granted to other WTO Member in an MRA. If there is a regulation presented for recognition, does the exporting country have to offer mutual recognition itself? If the exporting country is saying that its standards should be accepted under MFN rights because the importing country is party to an MRA, could the importing country say that its standards must be recognized as well? In other words, could the importing country impose a reciprocal obligation of mutual recognition on the exporting country? Lorand Bartels, in the journal article I mentioned earlier, says that the importing country cannot make this demand because MFN treatment is to be accorded unconditionally.¹⁶³ I have some concerns about that interpretation; I think it would turn the MFN right into a higher right than the original right. I do not see why the multilateralized right should be stronger than the original right in the MRA agreement.

There is academic discussion, then, about whether MRAs can be closed or whether they must be open in some way because of MFN rights. Is there an MFN obligation to recognize? According to what I have just discussed, I think there is an obligation, and it could be a fairly strong obligation. I am arguing that it should be seen as a somewhat softer obligation, a possible fifth approach: an obligation to consult with certain criteria and a burden of proof that would match the original right. I think that if we have a softer interpretation, we wind up with something that fits the assumption in the SPS agreement and the TBT agreement, which is that MRAs are possible. Those two agreements seem to be talking about the possibility of entering into an MRA that would be bilateral. It seems to me that it would make sense to interpret the MFN right in a fairly soft manner to make it fit with those agreements.

It is possible, then, that there are MFN rights in addition to whatever rights are in the SPS agreement at the WTO and the TBT agreement at the WTO. This leads to the question of whether other Members of the WTO would be able to argue that they are entitled to the benefit of NAFTA rights.

¹⁶² *Id.*

¹⁶³ See generally Bartels, *supra* note 159, at 699.

If I have just said that some of the NAFTA rights are stronger than the WTO right, could another Member of the WTO use MFN rights to say, “Okay, we are entitled to that stronger NAFTA right?” I think that it is not likely to matter that much concerning SPS rights because those rights are similar anyway, although in NAFTA there is an obligation for written reasons (if those are requested) when the importing country refuses. There is a significant difference, however, between the WTO TBT right and the much stronger NAFTA TBT right. Therefore, possibly some other member of the WTO could demand TBT rights for recognition of its technical regulations using an MFN obligation.

If we say that there are WTO rights that go beyond the rights outlined in the SPS agreement and the TBT agreement, then exactly the same arguments would apply concerning a separate Canada-United States MRA. It would be precisely the same thing: the WTO Member would be able to demand an open MRA even if Canada and the United States believed they had negotiated a closed one.

Next I raise the question of whether there might be similar arguments within NAFTA. Canada and the United States, for example, negotiate a separate MRA. What about Mexico? Would Mexico be able to ask for treatment within that MRA? Mexico, at the very least, would have whatever is available to all Members of the WTO. Within NAFTA, itself, there is a full MFN clause in the TBT chapter located in NAFTA Article 904(3)(b).¹⁶⁴ As a result, in fact, Mexico would have those rights as well.

Overall, I am saying that regulatory convergence is demanding. It is hard to negotiate, and it is hard to coordinate standards. It is hard to organize mutual recognition and update provisions every time a regulation changes. NAFTA already has significant rights for recognition of equivalence. If we are thinking of negotiating MRAs beyond that, we need to discuss why the NAFTA provisions are not sufficient.

Overall, I am suggesting that the possibility of MFN rights need to be kept in mind.

I thank you for your attention.

DISCUSSION FOLLOWING THE REMARKS OF MEERA FICKLING AND MAUREEN IRISH

MR. LEATHERBERRY: Now we have time for questions from the audience. Yes?

MR. BLANCHARD: Regarding energy, is there a bill, or are there provisions that would allow Canada and the United States to have a synchronized, harmonized standard? We are going to need that. Mexico is harder, but the

¹⁶⁴ NAFTA, *supra* note 136, art. 904(3)(b).

United States and Canada are going to require a similar regime that moves the ball forward. Is there anything right now that you think does that, or is that yet to be decided?

MS. FICKLING: There is nothing, to my knowledge, in any of the bills on the table that deals with United States-Canada coordination.¹⁶⁵ It is simply not addressed. I guess my answer, then, is that it is still to be determined.

MR. BLANCHARD: I would add one interesting thing. Before President Obama made his trip to Ottawa,¹⁶⁶ which was a year ago February and a very good trip, the Environmental Minister Jim Prentice of Canada¹⁶⁷ talked about coordination with Carol Browner.¹⁶⁸ They at least began talking about it.

I think, though, that Canada is probably waiting to see what the United States is going to do. Of course, the United States has really slowed the whole battle down, probably slowed it down until after the election, although there may be some energy legislation; but it may not be the kind that you were talking about.

MS. FICKLING: Yes, that is absolutely true. Canada recently declared in the Copenhagen Plan that they were going to follow United States actions on climate very closely. The target they submitted to Copenhagen was exactly identical to that of the United States.¹⁶⁹ In addition, Canada had a clause that said that their target was subject to whatever the United States decided on climate.¹⁷⁰

It is thus very true that Canada is adopting a wait-and-see approach. Canada wants the United States to pass its legislation before it passes any itself. Canada is a relatively small economy compared to the United States,¹⁷¹ and the two economies are heavily integrated. Therefore, it is understandable

¹⁶⁵ See generally *Canada-U.S. Energy Relations*, GOV'T OF CAN., http://www.canadainternational.gc.ca/washington/bilat_can/energy-energie.aspx?lang=eng (last modified Apr. 14, 2009).

¹⁶⁶ See generally, Denis McDonough, Deputy Nat'l Sec. Advisor for Strategic Commc'n, Office of the Press Sec., Press Briefing on the Trip of the President to Canada (Feb. 17, 2009), available at <http://www.whitehouse.gov/the-press-office/press-briefing-21709>.

¹⁶⁷ Jim Prentice, CONSERVATIVE PARTY CAN., http://www.conservative.ca/?section_id=1051&linkTo=true&districtId=1719 (last visited Jan. 1, 2011).

¹⁶⁸ Frances Romero, *Energy Czar: Carol Browner*, TIME MAG. (Dec. 15, 2008), <http://www.time.com/time/politics/article/0,8599,1866567,00.html> (stating that Carol Browner was head of the Environmental Protection Agency from 1993 to 2001).

¹⁶⁹ See Copenhagen Letter, *supra* note 28.

¹⁷⁰ *Id.*

¹⁷¹ Canada, CENT. INTELLIGENCE AGENCY, http://www.theodora.com/wfbcurrent/canada/canada_economy.html (last updated Jan. 15, 2010) (indicating Canada had estimated GDP of \$1.287 trillion for 2009); United States, CENT. INTELLIGENCE AGENCY, <https://www.cia.gov/library/publications/the-world-factbook/geos/us.html> (last updated Jan. 3, 2007) (indicating the United States had an estimated GDP of \$14.12 trillion for 2009).

that Canada would take such an approach in order to minimize the impact on some of its more carbon-intensive industries. I think that is a concern for Canada.

There also has been a lot of talk within the Joint Public Advisory Committee of the North American Free Trade Agreement of coordinating some of these initiatives, but there is nothing embodied in the legislation that allows for this.¹⁷²

MR. LEATHERBERRY: Next?

MR. CUNNINGHAM: I am Dick Cunningham from Washington, and I am a trade lawyer. My question is for Ms. Fickling. You talked about the international allowances, the import purchasers, and the allowances as a competitiveness position. What you discussed is very different from the type of competitiveness measure that we think of traditionally in trade where a burden is imposed on a domestic industry; and then to level the playing field, the same burden is imposed on a foreign company. That would mean that, for example, a United States company has a carbon footprint of ten and a burden imposed on it of ten, and the same burden would be imposed on a foreign company. However, as I understand it, that is not what we are doing at all. We are imposing a burden measured by the foreign company's carbon footprint, which, in the case of China, might be, for example, fifty. I have seen studies saying that that would impose huge burdens on Chinese imports.

I will not get us into the mind-numbing complexities of Article 20 justifications and exceptions,¹⁷³ but it seems to me that the practice of one country imposing a disproportionate burden on another country compared to that which it imposes on its own domestic industries is not only unfair according to the World Trade Organization,¹⁷⁴ but would lead to, in the words of that great trade lawyer, Saddam Hussein, "the mother of all trade wars."¹⁷⁵

MS. FICKLING: The details of how this program is mainstreamed are not in the legislation.¹⁷⁶ They are to be determined pretty far in the future.

Exactly how this measure is going to be imposed, whether it is going to be done based on United States carbon intensity, foreign carbon intensity, or in accordance with World Trade Organization (WTO) jurisprudence, is unclear. In the *Shrimp Turtle* case, the court said that foreign firms need to be able to appeal their treatment under the border allowance provision if, for

¹⁷² See generally COMM'N FOR ENVTL. COOPERATION, JOINT PUBLIC ADVISORY COMMITTEE (JPAC) ACTIVITY REPORT TO THE COUNCIL OF THE COMMISSION FOR ENVIRONMENTAL COOPERATION (CEC) SINCE JUNE 2007, available at http://www.cec.org/Storage/24/1546_Since_june_2007.pdf (table referencing several JPAC activities focused on fostering cooperation among the NAFTA countries).

¹⁷³ GATT, *supra* note 155, at 262.

¹⁷⁴ *Id.* at 198.

¹⁷⁵ See STEVE A. YETIV, *THE PERSIAN GULF CRISIS* 177 (1997).

¹⁷⁶ See GATT, *supra* note 155.

example, their firm produces their widgets in a “green” manner.¹⁷⁷ There are definitely WTO issues with the border allowance provision.

Things would be a lot easier if we simply had a carbon tax and could just do a border tax adjustment (BTA) on foreign products, but that is not the approach we are talking about. The International Reserve Allowance Program,¹⁷⁸ with the way the legislation is written, is trying to be a de facto BTA, but I think it would be treated somewhat differently under WTO rules.

MR. CUNNINGHAM: Is that really what we are trying to do? Or are we trying to put pressure on China to adopt a climate change regime that would achieve reductions similar to our reductions? Based on where this is headed, that seems to be an anthem of the trading system.

MS. FICKLING: That is one of the standard goals of the legislation: to act as a stick against China. I do not think it is going to be particularly effective.

The industries that this border allowance provision applies to are a pretty narrow set of industries.¹⁷⁹ These are not industries in which United States exports to China and India comprise a large portion of overall work production. By all of our estimates at the Peterson Institute, it is not going to be a very effective stick, but that is one of the goals of the legislation. The way it is written to apply in practice is to impose costs that the firm would have to pay if it produced in the United States.¹⁸⁰

¹⁷⁷ See, Appellate Body Report, *United States – Import Prohibition of Certain Shrimp and Shrimp Products*, WT/DS58/AB/R (Oct. 12, 1998); see also Panel Report, *United States – Import Prohibition of Certain Shrimp and Shrimp Products*, WT/DS58/R (May 15, 1998).

¹⁷⁸ AMERICAN CLEAN ENERGY AND SECURITY ACT OF 2009, H.R. REP. NO. 111-137, pt.1, at 229 (2009).

¹⁷⁹ See Elizabeth M. Lynch, *The U.S. Climate Change Bill: International Trade Implications & China*, HUFFINGTON POST (Sept. 7, 2009, 12:24 PM), http://www.huffingtonpost.com/elizabeth-lynch/the-us-climate-change-bil_b_278750.html (stating regulations will not impact China significantly because the impacted industries represent only a small portion of Chinese imports to the United States and an even smaller portion of the Chinese economy, in addition to listing the five industries covered by the new climate bill: “steel, aluminum, chemicals, paper, and cement”); see also H.R. REP. NO. 111-137, at 231 (limiting the International Reserve Allowance Program to industries producing “primary products”).

¹⁸⁰ See H.R. REP. NO. 111-137, at 230 (“The Administrator shall establish the program under paragraph (1) in a manner that addresses, consistent with international agreements to which the United States is a party, the competitive imbalance in the costs of producing or manufacturing primary products in industrial sectors resulting from the difference between – (A) the direct and indirect costs of complying with this title; and (B) the direct and indirect costs, if any, of complying in other countries with greenhouse gas regulatory programs, requirements, export tariffs, or other measures adopted or imposed to reduce greenhouse gas emissions.”).

Actually, for the first few years of the border allowance program, the rebates are scheduled to start phasing out in 2025.¹⁸¹ They will be phased out by 2035.¹⁸² Accordingly, from 2020 until 2027 to approximately 2028, the International Reserve might not even end up having to buy any allowances at the border because, within the United States, one hundred percent of industry average compliance costs are supposed to be compensated for; that must be taken into account under the current United States legislation.¹⁸³

My sense is that the legislation, as written, is narrowly focused, and it will not start having large effects until much later in the future. Again, the devil is in the details as to how this is going to be administrated. The Environmental Protection Agency administrator and the Executive Branch will have significant latitude when applying this law.

MR. CARMODY: Chi Carmody from The University of Western Ontario.¹⁸⁴

First of all, on the issue of using the Commission for Environmental Cooperation (CEC)¹⁸⁵ as a clearing house to adopt uniform or standardized definitions for some of these issues regarding the environmental atmosphere, does the CEC have the power to do that? Is it actually given that capacity in its treaty?

MS. FICKLING: The Commission for Environmental Cooperation (CEC) really does not have much power at all.

The CEC serves as a forum to talk about these issues and as a research arm of the North American Free Trade Agreement with regard to the environment.¹⁸⁶ They publish a number of reports every year.

They could do more with the regulation issues, highlighting what is on the table in the United States and Canada and what the sources of greenhouse gases are in each of the three countries. This is information that the CEC is very much in a position to disseminate, and it could be adopting a much broader role in doing so.

¹⁸¹ *Id.* 227-28.

¹⁸² *Id.* 228.

¹⁸³ *Cf.* Clean Energy Act, *supra* note 178 (While the rebates discussed in section 765 begin phasing out in 2026, section 766 specifies that the International Reserve Allowance Program cannot start before Jan. 1, 2025 so there will be no International Reserve Allowance Program from 2020-2025).

¹⁸⁴ *Chi Carmody, THE U. W. ONT.*, <https://www.law.uwo.ca/lawsys/pages/contents.asp?contentName=Instructors&contentFileName=ccarmody> (last visited Nov. 21, 2010).

¹⁸⁵ *About the Commission: About the CEC*, COMMISSION FOR ENVTL. COOPERATION, http://www.cec.org/Page.asp?PageID=1226&SiteNodeID=310&BL_ExpandID=154 (last visited Oct. 3, 2010).

¹⁸⁶ *Id.*

In terms of requiring these jurisdictions to harmonize their environmental provisions, the CEC really does not have any power to enforce or mandate that,¹⁸⁷ but it could serve as a forum if countries, themselves, wish to do so.

MR. CARMODY: Maureen, do you think that the issue of most favored nation treatment is something that complicates the conclusion of mutual recognition agreements (MRAs) and, therefore, to some extent explains why we have not had more advances in this area? Countries have not been willing to rush into MRAs because they are worried that some third country could say it needs the same treatment because it is part of the same treaty law.

MS. IRISH: I suppose the question is whether people are actually worried about most favored nation (MFN) rights at all.

I do not know that a great deal of the discussion about regulatory convergence has actually highlighted this issue, and it is one that concerns me. I am not sure that, for example, a slow development of mutual recognition agreements could, in fact, be attributed to concerns about this.

If it turns out that, in fact, there are MFN demands, then certainly they could be fairly onerous. Imagine having to give written reasons for every refusal to recognize. It could be very onerous.

I do have to say that I do not think this is an issue that has been much discussed, except in the *Journal of International Economic Law*,¹⁸⁸ which, of course, we all read regularly. Outside a fairly specialized field, though, I am not sure that it is much discussed.

I think mutual recognition, in fact, is difficult to organize because you must have some provision for continual updating. Standards change. Governments regulate. It is difficult to coordinate.

MR. FUNG: David Fung here.

First of all, I am not a lawyer, nor would I really want to be one. I do not know how you are going to deal with these issues because we as business people run way ahead of what these regulations are doing.

Take the iPad: inside there are probably twenty to forty countries' components.¹⁸⁹ What are the regulations for each one of those components? How do you define whether that is really a product of China if only the labor components are made in China; only \$12 of the \$500 is from China.

¹⁸⁷ *Id.* (listing one goal of the CEC: to "promote the effective enforcement of environmental law," which indicates it does not enforce environmental law itself).

¹⁸⁸ See, e.g., Irish, *supra* note 138.

¹⁸⁹ Hal R. Varian, *An iPod Has Global Value. Ask the (Many) Countries That Make It.*, N.Y. TIMES (June 28, 2007), <http://www.nytimes.com/2007/06/28/business/worldbusiness/28scene.html> (discussing how iPod has approximately 450 components coming from a wide variety of countries, which are often difficult to identify because Apple does not identify all manufacturers of components used in its products).

How do we define the product? What are the regimes that one would use to define that product?

MS. IRISH: Certainly, I think there is a great deal of standardization that simply has developed through market forces. Some of it would be through recognized international standardizing organizations, and some of it is simply through the operation of market forces.

If that is the case, is there really a need for governmental mutual recognition agreements? I suppose that is the issue.

MR. FUNG: Thank you. Our legislatures and our politicians are also falling behind. You mentioned the issue of trading hydropower in the Canadian border provinces with the thermal power from the coal-fire power plants on the United States side. The legislation tried to prevent that kind of bilateral trade. That is the most harm we can do to the environment. Our legislatures understand that if Canada does not import electrical power from those coal-fire power plants in the United States at night during the low demand period, some of those power plants may have to shut down frequently, which would cause enormous damage to the equipment of the power plants.

If the Canadian hydropower would stop producing at night and not be able to retain the water to generate the additional electrical power for export during the day, then the United States would have to use energy from coal-fire power plants to meet demand during the day. We should, therefore, encourage that kind of transfer rather than trying to discourage it. By putting in regulations to discourage this kind of bilateral trade, thinking that we are trying to be green, we are actually going to cause a lot more carbon emission in the process.

MS. FICKLING: Let me clarify. It is not that the border states are dis-barring hydropower from being imported at all or even trying to limit the imports of hydropower from Canada. That is not what they are trying to do. The Renewable Portfolio legislation mandates that the state must produce a certain percentage of their electricity from renewable energy.¹⁹⁰ In that particular legislation, there are certain types of electricity that will count as being renewable, and each state specifies what those types of electricity are.¹⁹¹

If a state is currently importing a large amount of hydropower from Canada, the Renewable Portfolio legislation is not intended to stop that at all. Its intention is to create new renewable generation.¹⁹² Therefore, if it is eco-

¹⁹⁰ *States With Renewable Portfolio Standards*, U.S. DEP'T OF ENERGY (May 2009), http://apps1.eere.energy.gov/states/maps/renewable_portfolio_states.cfm.

¹⁹¹ See generally EDWARD A. HOLT, CLEAN ENERGY STATES ALLIANCE, INCREASING HARMONIZATION AMONG STATE RPS PROGRAMS 8 (2008), available at http://www.cleanenergystates.org/JointProjects/RPS/Holt_CESA_RPS_Harmonization_d2_080819.pdf (discussing the various market barriers that exist due to the fragmented nature of RPS programs).

¹⁹² See *Renewable Portfolio Standards Fact Sheet*, U.S. ENVTL. PROTECTION AGENCY,

nomical for the state to import a lot of hydropower from Canada, it is not intended to stop that at all.

Different states treat that differently; some states count large Canadian hydropower as renewable electricity.¹⁹³ Some wish to keep the definition of renewable electricity limited to certain kinds of electricity, such as solar and wind, and to scale up additional sources to be used in the future.¹⁹⁴

This is just a long-winded way of saying that it is not a barrier to hydropower being imported to the United States at the status quo level. It might not necessarily encourage additional imports, but it is really not the same as saying that the state is disallowing hydropower from being imported.

I thought you brought up a really good point in regard to products being comprised differently. Many parts are shipped off to their final destination without regard to emissions.

Getting back to your question about how this is going to be applied and whether it is going to be applied at the foreign emissions level or the United States emissions level, calculating the emissions that go into a particular product for import that has been constructed in twelve different countries would be an administrative nightmare.

My guess is that they would probably calculate the emissions intensity of a certain product at the United States emissions level, mainly to avoid the administrative nightmare that would result if it were calculated in some other manner. It would appear to make more sense to regulate at the domestic emissions intensity.

MR. LEATHERBERRY: One more question, and then we will have to take a break.

MR. HIBBITTS: Bernard Hibbitts, Canadian professor at the University of Pittsburgh School of Law.¹⁹⁵

Maureen, at the beginning of your presentation, you said that regulatory convergence is hard to accomplish without convergence of governments. I am pretty sure I know what you mean, but I would love to have you elaborate on that.

MS. IRISH: It seems to me that it is easier to have a principle, such as the Cassis de Dijon principle in the European Community, where there is an overall governmental structure at the Community level to accomplish agreed upon European Community regulations. There are systems there for deci-

http://www.epa.gov/chp/state-policy/renewable_fs.html (last updated Oct. 7, 2010).

¹⁹³ *Id.*

¹⁹⁴ *Id.* (providing a table showing that almost every state's RPS program makes biomass, biofuels, hydro, landfill gas, photovoltaics, solar thermal electric, and wind eligible technologies while inclusion of numerous other technologies varies widely among the participating states).

¹⁹⁵ Bernard J. Hibbitts, U. PITTSBURGH, <http://faculty.law.pitt.edu/hibbitts/> (last visited Nov. 21, 2010).

sion-making. Between sovereign independent countries, however, we simply do not have that.

It seems to me that it becomes difficult to talk about mutual recognition agreements, or regulatory convergence, unless you have some centralizing institutional law outlined. If there is a centralizing institution, then obviously you look to that, the power within the institutions and how things actually operate.

Governments regulate in an ongoing way. That is what they are supposed to do. If we assume that there is going to be convergence, then do we need other levels to coordinate? I am not saying that it is impossible for governments to cooperate. But if we are expecting things will be very coordinated, as within the European Union, then we need a structure that is very present. I do not think that sovereign independent nations really expect that, nor do members of the public. Thus it seems to me that regulatory convergence is, in some ways, very challenging.

MR. LEATHERBERRY: Thank you to our panelists.

