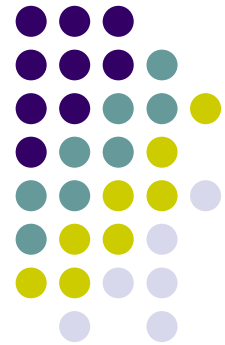


# US Climate Legislation Implications and Prospects: Challenges for Canada

**Gary Clyde Hufbauer & Jisun Kim**

Peterson Institute for International Economics

International Trade and Investment Centre meeting  
on Energy, Environment, Trade and Investment  
Conference Board of Canada  
October 15, 2009



## American Clean Energy and Security Act of 2009 (ACESA or Waxman-Markey bill)

- US House passed the Waxman-Markey bill by a close vote of 219-212 on June 26, 2009.
- The Waxman-Markey bill has five titles: clean energy (title I), energy efficiency (title II); reducing global warming pollution (title III); transitioning to a clean energy economy (title IV); and agriculture and forestry related offsets (title V).
  - Title I includes a combined efficiency and renewable electricity standard that requires retail electric suppliers to meet 6% of their power needs by 2012 via electricity generated from renewable resources and energy efficiency savings, increasing to 20% in 2020.
  - Title III establishes a mandatory GHG control program based on the cap-and-trade approach by amending the Clean Air Act (CAA).
- **Emissions Targets**
  - For covered entities (economy-wide goal: 20 % by 2020):
 

2012: 3 % below 2005 levels	2020: 17 % below 2005 levels
2030: 42 % below 2005 levels	2050: 83 % below 2005 levels

# The Waxman-Markey bill and Cost Containment Mechanisms



- **Allowance Allocations**

- About 70% to 80 % of allowances will be awarded free to industries during the initial years, but phased out based on different schedules.
  - ❖ 44% for electric utility sector; up to 15 % for trade vulnerable industries
  - ❖ Some allowances also go to states for renewable energy and efficiency investment; local natural gas distribution; automakers toward advanced technologies; investments in CCS technology, oil refineries, domestic adaptation to climate change, plus international adaptation and clean technology transfer.

- **Other Cost Containment Measures**

- Unlimited trading
- Unlimited banking
- Borrowing without or with interest
- Strategic reserve of allowances
- International emission allowances
- Emissions offsets

## The Waxman-Markey bill and Competitiveness Concern



- **Emission Allowance Rebate Program**
  - Sectors are presumably eligible for rebates if a) they meet both an energy intensity of at least 5 % or GHG intensity of at least 5 % threshold, plus a 15% trade intensity; or b) they have an energy or GHG intensity of at least 20 %.
  - Rebates are distributed to eligible facilities on a product output basis, with compensation provided for both direct and indirect compliance costs.
  - Rebates are phased out to zero in 2035.
- **About 42 sectors at a six digit NAICS level would qualify for rebates under the program (table 1). Those are also sectors that may be subject to the international reserve allowance program (border adjustment).**
  - The rebate program itself might be enough to address competitiveness concerns for GHG-reduction costs.
  - The rebate program may discriminate not only against foreign producers but also among domestic producers since some best practice firms may receive rebates in excess of 100 percent their costs.

## The Waxman-Markey bill and Competitiveness Concern *(cont'd)*



### • International Reserve Allowance Program

- Upon the president's determination, starting in January 2020, this program can require importers of covered goods to submit permits to import covered goods into the United States -- when less than 85 percent of imports in the sector come from "well-behaved" countries, meaning countries that meet one of the following criteria:
  - ❖ Are parties to an international agreement to which the United States is a party that includes a nationally enforceable GHG reduction commitment at least as stringent as the US commitment.
  - ❖ Are parties to a multilateral or bilateral emission reduction agreement for that sector to which the United States is a party.
  - ❖ Have annual energy or GHG intensity performance for the sector that is equal to or less than that of the United States.
- Exempted from the permit requirements are products produced in:
  - 1) LDCs; 2) Countries with less than 0.5 % of total global GHG and less than 5% of US imports of covered goods with respect to the eligible industrial sector

## The Waxman-Markey bill and Competitiveness Concern *(cont'd)*

- **International negotiating objectives**
  - The bill recognizes that competitiveness issues can be addressed most effectively through internationally negotiated agreements and states that it is US policy to work proactively in the UNFCCC, and other forums, to establish binding agreements, including sectoral agreements, committing all major GHG emitting nations to contribute equitably to the reduction of global greenhouse gas emissions.
  - The bill sets out negotiating objectives to reach an internationally binding agreement that covers all major GHG emitters and recognizes competitive imbalances that lead to carbon leakage.
  - While the US Congress is seeking ways to incorporate its competitiveness concerns in the post-Kyoto treaty, developing countries are seeking ways to prevent the use of border measures against their exports.

## Prospects for US Climate Legislation



- **While other countries are eager to see the United States move forward with its climate legislation, it is almost certain that US climate legislation will not be in place before Copenhagen.**
  - While the Obama administration lists climate legislation among its top priorities, the administration has taken a hands-off attitude toward the design details of both House and Senate legislation.
  - Team Obama has devoted most of its political capital to health care reform.
  - Senators Boxer and Kerry released their draft bill, the Clean Energy Jobs and American Power Act, on Sep. 30, 2009. The overall architect of the Boxer-Kerry bill is similar to the House version, but with some differences (e.g. a 20% cut from 2005 levels by 2020 for covered entities). Many details are to be decided later as negotiations in the Senate proceed.

## Prospects for US Climate Legislation *(cont'd)*

- **Meanwhile, the EPA has vowed to move forward with its own regulations with respect to GHGs. Conceivably, as the US debate unfolds, GHG limits could be imposed by the EPA, and cap-and-trade legislation could be put on the shelf. The draft EPA regulations will likely be used as leverage for both US legislation and Copenhagen talks.**
  - In September 2009, the EPA announced that the agency will, for the first time, require large emitters of heat-trapping emissions to begin collecting GHG data under a new reporting system on January 1, 2010.
  - In September 2009, the EPA and the DOT issued a joint proposal to boost the average fuel economy for cars and light trucks, thereby saving fuel and reducing GHG emissions. The proposal would require vehicles, covering model years 2012 through 2016, to meet an estimated combined average emissions level of 250 grams of CO<sub>2</sub> per mile in model year 2016, equivalent to 35.5 miles per gallon (mpg)

## Implications for Canada

- **Delayed US legislation could delay Canadian legislation.**
  - Critical details of the Canadian plan may wait until US climate legislation takes a better defined shape. US legislation may well be used as a template for Canada's own GHG control program.
- **Canadian hydropower exported to the US may not meet the renewable energy standards set forth in the bill.**
- **The bill includes a provision that temporarily prohibits states from running their own cap-and-trade programs, such as the WCI and the RGGI, for 6 years (2012 to 2017).**
  - Other state-based programs that set performance standards, such as LCFSs, and other climate related programs (that are not based on cap-and-trade mechanism) are not pre-empted.
  - A number of Canadian provinces that are members of the regional initiatives may be affected by preemption provisions.

## Implications for Canada *(cont'd)*

- **Low Carbon Fuel Standard (LCFS) could have adverse impacts on Canadian oil industries.**
  - In April 2009, the California Air Resources Board (ARB) approved a regulation to implement the California LCFS that requires all transportation fuel sold in California to reduce its carbon intensity by at least 10 percent by 2020.
  - Since other stages in each fuel's lifecycle may not be within the control of the oil industry, most of 10 percent reduction may have to be effected by oil producers. This could put a special burden on Alberta.
- **LCFS provisions similar to the California standards were stripped from the version of the Waxman-Markey bill passed by the House. However, California's LCFS still raises major concerns for Alberta's oil sands. Moreover, several states are now working to implement a similar standard.**

## Implications for Canada *(cont'd)*

- **Canadian industries could be hard-hit by border measures if its national GHG control system is seen to be less demanding than the US program.**
  - All industries listed in table 1 may be required to submit permits at the border unless Canada has climate policies in place equally stringent as US programs.
  - Policy friction would be more intense in sectors where cross-border competition is high (table 1).
  - Table 2 shows that Canada is largest supplier to the US for chemicals, nonferrous metals, and paper and wood products; the second largest for ferrous metals and food products. As a whole, Canada is the single largest exporter of those energy intensive products (\$47 billion in 2008)
  - Mechanisms envisaged in US climate legislation – for example, subsidies and border adjustment -- would adversely affect the competitiveness of some Canadian industries either in the domestic Canadian market or the US market. In particular, rebates (via free allowances) extended to US firms in excess of their emission costs could be perceived as subsidies that give an unfair advantage to US products.

## Table 1. Industries Qualifying for Rebates under Title IV of ACESA and US trade with Canada, 2008



NAIC Code	Description	US Imports from Canada (M, mill. US\$) <sup>b</sup>	US Exports to Canada (X, mill.US\$) <sup>c</sup>	Index of Intra-Industry Trade $[1 -  X-M  / (X+M)]$
<i>Food Products</i>				
311221	WET CORN MILLING PRODUCTS	188	280	0.80
31131X	SUGARS	37	46	0.89
<i>Paper &amp; Wood Products</i>				
321219	RECONSTITUTED WOOD PRODUCTS	1,051	254	0.39
322110	PULP MILL PRODUCTS	2,867	132	0.09
322121	PAPER (EXCEPT NEWSPRINT) MILL PRODUCTS	2,345	1,518	0.79
322122	NEW PRINT MILL PRODUCTS	4,849	127	0.05
322130	PAPERBOARD MILL PRODUCTS	122	1	0.02
<i>Chemicals</i>				
314992	TIRE CORDS AND TIRE FABRICS	98	57	0.74
325110	PETROCHEMICALS	2,213	739	0.50
325131	INORGANIC DYES AND PIGMENTS	290	260	0.95
325132	SYNTHETIC ORGANIC DYES AND PIGMENTS	19	86	0.36
325181	ALKALIES AND CHLORINE	152	201	0.86
325182	CARBON BLACK	123	94	0.87
325188	ALL OTHER BASIC INORGANIC CHEMICALS	1,976	948	0.65
325191	GUM AND WOOD CHEMICALS	11	31	0.52
325192	CYCLIC CRUDE AND INTERMEDIATES	1,286	240	0.31
325193	ETHYL ALCOHOLS	35	308	0.20
325199	ALL OTHER BASIC ORGANIC CHEMICALS	1,440	3,318	0.61
325211	PLASTICS MATERIALS AND RESINS	5,218	5,063	0.98
325212	SYNTHETIC RUBBERS	243	621	0.56
325222	NONCELLULOSIC ORGANIC FIBERS	303	310	0.99
325311	NITROGENOUS FERTILIZERS	1,940	154	0.15
335991	CARBON AND GRAPHITE PRODUCTS	75	214	0.52

**Table 1. Industries Qualifying for Rebates under Title IV of ACESA and US trade with Canada, 2008 (cont'd)**

NAIC Code	Description	US Imports from Canada (M, mill. US\$) <sup>b</sup>	US Exports to Canada (X, mill.US\$) <sup>c</sup>	Index of Intra-Industry Trade [1- X-M /(X+M)]
<i>Non-Metallic Mineral Products</i>				
327111	CHINA PLUMBING FIXTURES AND CHINA AND EARTHENWARE BATHROOM ACCESSORIES	0	51	0.00
327112	CHINA, FINE EARTHENWARE AND OTHER POTTERY PRODUCTS	5	153	0.06
327113	PORCELAIN ELECTRICAL SUPPLIES	28	26	0.96
327122	CERAMIC WALL AND FLOOR TILES	2	24	0.15
327123	OTHER STRUCTURAL CERAMIC PRODUCTS	0	2	0.00
327124	CLAY AND ALUMINA ARTICLES	20	30	0.80
327125	NONCLAY REFRACTORY ARTICLES	71	123	0.73
327211	DRAWN, BLOWN, FLOAT AND FLAT GLASS	155	379	0.58
327212	OTHER PRESSED AND BLOWN GLASS AND GLASSWARE	162	332	0.66
327213	GLASS CONTAINERS	131	177	0.85
327310	CEMENTS	338	84	0.40
327410	LIME AND CALCINED DOLOMITE	32	23	0.84
327992	GROUND OR TREATED MINERAL AND EARTH	48	52	0.96
327993	MINERAL WOOL AND GLASS FIBERS	208	248	0.91
<i>Ferrous Metals</i>				
331111	IRON AND STEEL	6,847	7,182	0.98
331112	ELECTROMETALLURGICAL FERROALLOY PRODUCT	123	111	0.95
<i>Non-Ferrous Metals</i>				
331311	ALUMINA REFINING	12	239	0.10
331312	PRIMARY ALUMINUM	5,527	313	0.11
331419	PRIMARY SMELTING AND REFINING OF NONFERROUS METALS (EXCEPT COPPER AND ALUMINUM)	6,396	793	0.22
<b>Total</b>		<b>46,986</b>	<b>25,344</b>	<b>n.a</b>

## Table 2. US Energy-Intensive Imports by Top 10 Trading Partners, 2008

Chemicals		Ferrous Metals		Food Products		Nonferrous Metals		Nonmetallic Mineral Products		Paper & Wood Products	
Country	Imports (\$b)	Country	Imports (\$b)	Country	Imports (\$b)	Country	Imports (\$b)	Country	Imports (\$b)	Country	Imports (\$b)
Canada	15.42	China	7.60	Mexico	0.44	Canada	11.94	China	3.21	Canada	11.23
China	7.04	Canada	6.97	Canada	0.22	South Africa	3.23	Mexico	1.65	Brazil	0.96
Germany	5.29	Brazil	3.35	Guatemala	0.18	Mexico	2.86	Canada	1.20	Finland	0.95
Japan	4.54	Mexico	3.15	Australia	0.15	Russia	2.63	Italy	0.83	Germany	0.83
Saudi Arabia	4.09	Korea	2.31	France	0.11	UK	1.59	Germany	0.65	China	0.66
Algeria	3.88	Japan	2.31	Brazil	0.11	Peru	1.36	Japan	0.47	Japan	0.41
Trinidad & Tobago	3.58	Germany	1.97	Dominican Republic	0.08	Australia	0.99	France	0.43	Korea	0.36
Venezuela	3.37	India	1.83	El Salvador	0.07	Brazil	0.77	UK	0.19	Mexico	0.21
UK	3.25	Russia	1.72	Netherlands	0.07	Germany	0.75	Spain	0.18	France	0.17
Netherlands	2.98	Ukraine	1.48	Philippines	0.06	China	0.62	Brazil	0.17	Sweden	0.16
Russia	2.73	South Africa	1.22	Germany	0.06	Chile	0.58	Thailand	0.17	Norway	0.16
Subtotal	56.18		33.91		1.55		27.31		9.16		16.10
World Total	88.44		45.71		2.02		31.93		10.81		17.25