

Summary Paper | Federal, Regional, and Provincial Climate Change Policy and Legislation in Canada

January 2010

Canada

Federal Level

Past Policy

National Voluntary Challenge and Registry: 1995

The Voluntary Challenge and Registry (VCR) is a government-funded program that encourages organizations in the public and private sectors to voluntarily limit and reduce GHG emissions, and report annually on emission totals and reduction measures.¹

The VCR was highlighted as the key element of the federal government's National Action Program on Climate Change. However, though the program has achieved minor success, several analyses have concluded that the VCR design and support do not allow it to make significant headway towards real emission reductions.²

Regulatory Framework for Air Emissions: 2007

Released in April 2007³, the framework laid out greenhouse gas and air pollutant emission reduction targets, and was focused on four main areas⁴:

1. Mandatory greenhouse gas and air pollutant emissions targets and compliance mechanisms applicable to large emitters, including the electricity, oil and gas, and mining industries
2. Measures targeted at emissions from the transportation sector, and development of efficiency standards for cars and light trucks to be effected as early as 2011
3. Energy efficiency standards applicable to consumer and commercial products
4. Improvements to indoor air quality

An associated framework, focused specifically on industrial GHG emissions and air pollutants, was finalized in the spring of 2008, and related regulations and measures are currently under

¹ http://www.ghgregistries.ca/CHALLENGE/index_e.cfm

² <http://www.web.net/~robrien/papers/vcrpaper.html>

³ http://www.ec.gc.ca/doc/media/m_124/toc_eng.htm

⁴ http://www.macleoddixon.com/documents/Canadas_Regulatory_Framework_for_Air_Emissions.pdf

development⁵. This framework draws heavily from those measures laid out in the original framework, but elaborates and expands on those sections related to industrial emissions.

Turing the Corner: An Action Plan to Reduce Greenhouse Gases and Air Pollution

Released April 26 of 2007, the action plan is focused on regulating national greenhouse gas emissions and air pollutants, and reducing national emissions intensity. Specific goals of the plan include⁶:

- Mandatory targets on industry to achieve absolute GHG emission reductions of 150Mt by 2020
- Halving air pollution from industry by 2015
- Regulation of vehicle fuel efficiency of cars and light trucks, beginning with the 2011 model year
- Strengthening of energy efficiency standards

The action plan informed and directed the development of both the Regulatory Framework for Air Emissions and the Regulatory Framework for Industrial Greenhouse Gas Emissions.

Other significant actions⁷:

- 1996: The Federal ministers of Natural Resources and Environment publish new initiatives and improvement to existing climate change programs, including those related to energy efficiency
- 1998: Canada establishes a federal Climate Change secretariat
- 2000: The federal budget, announced in February, allocates CAD\$500 million in climate change funding from 1999 to 2003
- 2003: The federal government publishes the Climate Change Plan for Canada

Future Policy

Currently, the federal government is stalled on enacting legislation related to climate change. In future, as Canada begins to work towards policy and goals for greenhouse gas emission reductions and climate change mitigation, policymakers will likely target the following areas:

- Transportation
- Electricity generation
- Fossil fuel production, specifically of oil and gas
- Pulp and paper industry
- Cement production
- Iron and steel production

Canadian industries, particularly energy-intensive industries, could potentially be adversely affected if Canadian climate change policy lags behind future US legislation. Possible repercussions include⁸:

- Border tariffs
- Punitive measures against US trading partners that have not enacted similar climate policy

⁵ http://www.ec.gc.ca/doc/virage-corner/2008-03/pdf/541_eng.pdf

⁶ <http://www.iea.org/Textbase/pm/?mode=pm&id=3880&action=detail>

⁷ <http://www.greenlearning.ca/climate/policy/canadian-policy>

⁸ Proposed US Climate Change Legislation Poses Risks for some Canadian Industries
<http://www.conferenceboard.ca/press/newsrelease/10-45.aspx>

- The development of renewable energy standards for electricity generation that could exclude Canadian power and result in reduced export

As a result, the implementation of policies in the United States will likely act to motivate the adoption of similar scale policies in Canada.

Regional Level

Several strong partnerships, with related policy and standard development, have arisen between Canadian provinces and US states in the last few decades. Regional level initiatives are currently working towards the development and implementation of multi-jurisdictional and international cap and trade programs.

Western Climate Initiative (WCI)

Formed in February 2007, the Western Climate Initiative (WCI) is a “collaboration of independent jurisdictions working together to identify, evaluate, and implement policies to tackle climate change at a regional level”⁹. The WCI operates independently from national governments, and its partner members consist of the US states of Arizona, California, Montana, New Mexico, Oregon, Utah, and Washington, and the Canadian provinces of British Columbia, Manitoba, Ontario, and Quebec. There are also a number of observers to the WCI, including Alaska, Colorado, Idaho, Kansas, Nevada, Wyoming, Canadian province Saskatchewan, and the Mexican states of Baja California, Chihuahua, Coahuila, Nuevo Leon, Sonora, and Tamaulipas¹⁰.

The WCI requires its partner members to create detailed climate action plans and develop regional strategies to address climate change. Though it has a number of focuses, the main goals of the WCI are to¹¹:

- Set regional emissions reductions goals
- Develop a regional registry to track and manage emission reductions and offset credits
- Design and implement a multi-jurisdictional market-based cap and trade system

The proposed WCI cap and trade program is hoped to reduce GHGs, promote growth in green technologies, and contribute to the development of a clean energy economy. The WCI is currently aiming to reduce GHG emissions to 15% below 2005 levels by 2020, a goal established in August of 2007, and the cap and trade system is an important component of this effort¹².

WCI Cap and Trade Program

The Design Recommendations for the WCI Regional Cap and Trade program were released on September 23, 2008, following an extensive 18-month review process. The following were proposed in regards to the scope, implementation, and future of the system:

- The six major greenhouse gases would be covered: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF₆)

⁹ <http://www.westernclimateinitiative.org/>

¹⁰ <http://www.westernclimateinitiative.org/wci-partners-and-observers-map>

¹¹ http://www.mcmillan.ca/Upload/Publication/WesternClimateInitiative_0808.pdf

¹² <http://www.westernclimateinitiative.org/the-wci-cap-and-trade-program>

- Emissions from the following sectors of the economy would be covered: electricity generation (includes imported electricity), industrial and commercial fossil fuel combustion, industrial process emissions, gas and diesel consumption for transportation, and residential fuel use
- Only entities with annual emissions >25,000 metric tonnes of CO₂e will be covered by WCI
- The system would follow a phased introduction:
 - o Phase One: Initiated January 1, 2012 and covers emissions from electricity, industrial combustion at large sources, and industrial process emissions
 - o Phase Two: Initiated in 2015 and expands to include transportation and residential, commercial, and industrial fuels

The initial regional cap will be set at the best estimate of expected emissions from those sources covered at the onset of the program, and will be reduced annually until 2020 to achieve the targeted 15% reduction¹³.

On February 19, 2009, the WCI Working Committee released the 2009 – 2010 Work Plan, describing the steps to taken in the next 12 to 18 months in regards to the implementation of the cap and trade system. By 2011, each WCI partner is required to begin reporting GHG emissions, starting with the 2010 year¹⁴. Finally, the WCI cap and trade program is being designed for maximum compatibility with potential future national and international standards, and will certainly be affected under the provisions of the American Clean Energy and Security Act, wherein no regional or state level cap and trade programs will be allowed to operate between 2012 and 2017 following the implementation of a federal level cap and trade program.

For more information:

- Western Climate Initiative website: <http://www.westernclimateinitiative.org/>
- Pew Centre on Global Climate Change – WCI: <http://www.pewclimate.org/WesternClimateInitiative>

Regional Greenhouse Gas Initiative (RGGI; ReGGIe)

The Regional Greenhouse Gas Initiative is a regional cooperative established in 2003 by states and provinces in the Northeastern United States and Canada to reduce GHG emissions. Current member are the US states of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont, and the Canadian provinces of Newfoundland and Labrador and Prince Edward Island. Observers include Pennsylvania, the District of Columbia, Quebec, New Brunswick, Nova Scotia, and Ontario.

RGGI Cap and Trade System

RGGI has created the first mandatory, market-based CO₂ emissions reduction program in the United States to reduce GHG emissions. To date, the above-listed members have capped CO₂ emissions from the power sector, and will reduce these emissions 10% by 2018¹⁵.

The specifics of the RGGI cap and trade program are outlined below.

¹³ http://www.env-ne.org/public/resources/pdf/ENE_WCI__Summary.pdf

¹⁴ <http://www.westernclimateinitiative.org/the-wci-cap-and-trade-program/faq>

¹⁵ http://rggi.org/docs/program_summary_10_07.pdf

- Establishment of a multi-state CO₂ emissions cap that will gradually decrease to 90% of original cap
- Requirement of electric power generators to hold allowances equal to their CO₂ emissions over a three year control period
- Provision of a market-based emissions auction and trading system where electric power generators can buy, sell, and trade CO₂ emissions allowances
- Support of low-carbon intensity solutions, including energy efficiency and renewable energy, using the proceeds of allowance auctions
- Offsetting to help companies meet compliance obligations

The RGGI cap and trade program was made effective January 1, 2009, following initial auctions held in September and December of 2008. The regional CO₂ cap was set at 188 million tons for the ten member states, and those entities covered by the program are all fossil-fuel fired electric power plants 25 MW or greater in size, translating into approximately 225 facilities region-wide.¹⁶

The RGGI cap and trade program was initiated January 1, 2009, and the first phase, from 2009 to 2014, will aim to stabilize GHG emissions. The subsequent phase, from 2015 to 2018, aims to reduce emissions by 2.5% each year, culminating in reductions of 10%¹⁷.

For more information:

- Regional Greenhouse Gas Initiative website: <http://www.rggi.org/home>
- Regional Greenhouse Gas Initiative Executive Summary: http://www.rggi.org/docs/RGGI_Executive%20Summary_4.22.09.pdf
- Pew Centre on Global Climate Change – RGGI: http://www.pewclimate.org/what_s_being_done/in_the_states/rggi

Midwestern Greenhouse Gas Reduction Accord (MGGRA)

The MGGRA is a commitment made by Midwestern states and provinces to reduce GHG emissions through a regional cap and trade program and other related policy measures. Signatories to the Accord, which was signed on November 15, 2007 at the Midwestern Governors Association Energy Security and Climate Change Summit, are the six US states of Illinois, Iowa, Kansas, Michigan, Minnesota, and Wisconsin, and the Canadian province of Manitoba¹⁸.

The Accord commits signatory members to establish a GHG reduction program, specifically¹⁹:

- Setting of regional GHG emission reduction targets
- Development of a multi-sector cap and trade system and complementary policies
- Development and participation in a formal GHG emissions registry for crediting and compliance tracking
- Enabling of complementary action and integration with similar programs in other regions
- Reduction of emissions leakages to non-participating states
- Maximizing of employment and economic benefits

In January 2009, draft recommendations on the design of the MGGRA cap and trade program were released.

¹⁶ http://www.rggi.org/docs/RGGI_Executive%20Summary_4.22.09.pdf

¹⁷ http://www.rggi.org/docs/RGGI_Executive%20Summary_4.22.09.pdf

¹⁸ <http://www.midwesternaccord.org/index.html>

¹⁹ http://www.pewclimate.org/what_s_being_done/in_the_states/mggra

For more information:

- Midwestern Greenhouse Gas Reduction Accord website:
<http://www.midwesternaccord.org/index.html>
- Pew Centre on Global Climate Change – MGGRA:
http://www.pewclimate.org/what_s_being_done/in_the_states/mggra

Quebec and Ontario Memorandum of Understanding on Energy

On June 2nd, 2008, Quebec and Ontario signed a memorandum of understanding (MOU) supporting the development of an inter-provincial cap and trade initiative. The agreement stated that both provinces are “actively pursuing greater energy efficiency and conservation and demand management through various programs, standards and codes and desire to enhance cooperation in this regard.”²⁰

The MOU promotes the sharing of information and research related to energy between the two provinces, as well as joint technological and policy development. Specific goals include²¹:

- Improvement of knowledge transfer on energy efficiency, conservation, and demand management
- Joint technological and policy development for emerging and renewable energy technologies
- Working towards synergy of the two provinces electricity systems through improved planning coordination and electricity interconnectedness

Under the MOU, a potential cap and trade system would use 1990 baselines for GHG emissions, and could potentially be implemented as early as 2012.

Provincial Level

In Canada, the most significant legislation and policies are currently being implemented and enacted at the provincial level. The federal government, at present, is largely removed from the development of environmental policy as it applies to climate change, and Canada has been the subject of heavy criticism in the global community as a result.

Quebec²²

In Quebec, provincial reductions measures are focused primarily on the promotion of public transit, electric vehicles, and intermodal freight transport, energy recovery from biomass, and land use planning reform.

- Climate change plans:
 - o Quebec and Climate Change – A Challenge for the Future, 2006 – 2012 Action Plan
 - o Quebec Energy Plan, 2006

²⁰ <http://news.ontario.ca/opo/en/2008/06/memorandum-of-uuderstanding-between-the-government-of-ontario-and-the-government-of-quebec-on-energy.html>

²¹ <http://news.ontario.ca/opo/en/2008/06/memorandum-of-uuderstanding-between-the-government-of-ontario-and-the-government-of-quebec-on-energy.html>

²² Highlights of Provincial Greenhouse Gas Reduction Plans, August 2009:
<http://pubs.pembina.org/reports/highlights-of-provincial-greenhouse-gas-reduction-plans.pdf>

- Quebec Public Transit Policy, 2006
- Provincial targets:
 - On November 23, 2009, Quebec pledged to reduce its GHG emissions by 20% below the 1990 levels by 2020
 - Under the Climate Action Plan 2001, Quebec committed to reductions of 10% below 1990 levels by 2020
- Significant emission reduction measures:
 - Electricity
 - Allocation of funds to energy efficiency programs targeted at reducing heavy fuel oil use
 - Wind generation and biogas collection programs
 - Other Industry
 - Development of a cap and trade system as part of the WCI and MOU with Ontario
 - Legislation, in the form of Bill 42, passed in June of 2009, enables the implementation of a cap and trade system
 - A voluntary agreement for emissions reductions with the aluminium industry, created in 2007, covers the 2008 – 2012 period
 - Environmental and green technology industries development strategy launched May 2008
 - Transportation
 - Government funding (\$4.5 billion from 2009 – 2014) for research and advances in public transit, alternative transport, energy efficiency in freight, new technologies, and integration of intermodal transportation
 - Committed to adopt California vehicle standards, in line with California implementation (enabling legislation passed in 2008)
 - Modest carbon tax
 - Buildings and Municipalities
 - Amendments to Quebec’s Building Code with new efficiency standards (2 years overdue)
 - Climate Municipalities Program (launched April 2009) provides \$10 million in support for municipalities developing GHG inventories and reduction strategies
 - Energy efficiency program for building heating currently under development
 - Other Sectors
 - Regulation on incineration and landfilling of waste requires capture and elimination or use of landfill gas for major sites
 - Allocation of funds for the development of bioenergy in various sectors
- Significant legislation:
 - Carbon Tax regulation
 - Cap and Trade Bill (Bill 42): June 2009
 - Regulation on the incineration and landfilling of waste

Ontario²³

²³ Highlights of Provincial Greenhouse Gas Reduction Plans, August 2009:
<http://pubs.pembina.org/reports/highlights-of-provincial-greenhouse-gas-reduction-plans.pdf>

In Ontario, reductions measures are targeted primarily on transit overhaul, renewable power, and the associated phase-out of coal, and the development and implementation of building energy efficiency standards.

- Climate change plans:
 - The Big Move (GTA/Hamilton Regional Transit Plan), 2008
 - Ontario's Climate Change Action Plan – Annual Report 2007 – 2008, 2008
 - Go Green – Ontario's Action Plan on Climate Change, 2007
- Provincial targets:
 - Ontario has stated GHG emission reductions of 6% below 1990 levels by 2014, 15% below 1990 levels by 2020, and 80% below 1990 levels by 2050
 - However, the above targets have not been put into legislation
- Significant measures:
 - Electricity
 - Phase out of coal use by 2014
 - Green Energy Act – consolidates new initiatives and existing legislation to create a streamlined and enabling environment for renewable power
 - Committed \$112 million over 5 years for home energy audit and retrofit programs
 - Integrated Power System Plan (IPSP) to enhance emphasis on renewable power
 - MOU with Quebec on energy (June 2008)
 - Other Industry
 - Development of a cap and trade system as part of the WCI and MOU with Quebec
 - Bill 185 (May 2009) = legislation passed enabling implementation of cap and trade system
 - Beginning in 2008, the Ontario Research Fund will spend \$625 million over four years to commercialize innovative goods and clean technologies
 - Transportation
 - Pledged \$11.5 billion to MoveOntario 2020, a transit initiative
 - Effected the Ethanol in Gasoline regulation in 2007 requiring 5% ethanol in gasoline
 - Pledged to develop low carbon fuel standard requiring reduction of 10% in carbon emissions from transportation fuels by 2020
 - Buildings and Municipalities
 - Ontario's 2006 Building Code contains new energy efficiency standards that will be phased in between 2006 and 2012
 - Energy Efficiency Act (now integrated into the Green Energy Act) established minimum efficiency levels for product categories
 - Funds for residential retrofitting
 - Committed to a goal of the instalment of 100,000 solar roofs
 - Other Sectors
 - Forest conservation measures
 - Landfilling Sites and Waste Management regulations require gas capture at landfills

- Government aims to reduce electricity in government buildings 20% from 2006 levels by 2010, and are also requiring LEED standard certification for new government buildings and renovations
- Significant legislation:
 - Green Energy and Green Economy Act (Bill 150): 2009
 - Cap and Trade Bill (Bill 185): 2009
 - Transit Projects and Greater Toronto Transit Authority Undertakings (Ontario Regulation 231): 2008
 - Landfilling Sites (Ontario Regulation 216): 2008
 - Waste Management (Ontario Regulation 217): 2008
 - Cessation of Coal Use (Ontario Regulation 496): 2007
 - Ethanol in Gasoline (Ontario Regulation 76): 2007
 - Building Code (2006 Updates)(Ontario Regulation 350): 2006

Alberta²⁴

Alberta reduction measures are heavily focused on carbon capture and storage.

- Climate change plans:
 - Climate Change Strategy: Responsibility/Leadership/Action, 2008
 - Provincial Energy Strategy, 2008
- Provincial targets:
 - It should be noted that Albertan targets are considered weak and outdated compared to the majority of jurisdictions in the industrialized world
 - Have stated goals of 20Mt reductions below business-as-usual (BAS) by 2010, 50Mt reduction below BAS by 2020, and 200Mt reduction below BAS by 2050
 - None of the above targets have been put into legislation
- Significant measures:
 - Electricity
 - Commitments to carbon capture and storage, but measures for renewable energy and energy efficiency remain underdeveloped
 - Specified Gas Emitters Regulation (2007) sets a 12% emissions intensity reduction target for large facilities (emitting >100,000 tCO₂e/year)
 - Alberta Carbon Capture and Storage Development Council established (2008)
 - Transportation
 - Measures are focused on bioenergy and public transit
 - Government has committed \$2 billion for GreenTRIP, a public transit initiative supporting new public transit alternatives throughout the province
 - Intent to introduce a Renewable Fuels Standard requiring 5% ethanol in gasoline and 2% renewable content in diesel
 - Buildings and Municipalities
 - Efficiency standards and municipal partnership measures remain in development

²⁴ Highlights of Provincial Greenhouse Gas Reduction Plans, August 2009:
<http://pubs.pembina.org/reports/highlights-of-provincial-greenhouse-gas-reduction-plans.pdf>

- 2008 climate strategy program announced as incentive to promote use of energy efficient appliances and home improvements
 - Other Sectors
 - New provincial buildings required to be constructed to LEED silver or equivalent standard
 - Are in the process of developing a Green Procurement Policy
- Significant legislation:
 - Climate Change and Emissions Management Fund Administration Regulation (Alberta Regulation 120): 2009
 - Climate Change and Emissions Management Act: 2007
 - Specified Gas Emitters Regulation (Alberta Regulation 139): 2007
 - Specified Gas Reporting Regulation (Alberta Regulation 140): 2007

British Columbia²⁵

In addition to those measures presented below, consideration is being given to emissions pricing, transportation, buildings, agriculture, forestry, and energy. There is some concern that the growing natural gas sector and road and highway expansion could compromise legislated targets.

- Climate change plans:
 - BC Climate Action Plan – Phase One, 2008
 - Provincial Transit Plan, 2008
- Provincial targets:
 - Credibility of goals is enhanced by legislation and interim goals
 - 33% below 2007 level by 2020; 80% below 2007 level by 2050
 - Above targets were legislated in the November 2007 Greenhouse Gas Reductions Target Act (GGRTA)
 - As mandated by the GGRTA, BC announced interim goals of 6% below 2007 levels by 2012 and 18% by 2016; these have not been legally mandated yet
- Significant measures:
 - Cross-Sectoral
 - Revenue neutral carbon tax on all emission from fossil fuel combustion (July 2008)
 - Electricity
 - Zero GHG electricity production – all new electricity generation projects will have net zero emissions (2008)
 - Amendments to the Utilities Commission Act require BC Hydro to achieve electricity self-sufficiency by 2016
 - Instalment of Power Smart meters in every home in BC by 2012
 - Other Industry
 - Committed to the development of a cap and trade system as part of the WCI
 - Committed to eliminate routine flaring at producing wells and production facilities

²⁵ Highlights of Provincial Greenhouse Gas Reduction Plans, August 2009:
<http://pubs.pembina.org/reports/highlights-of-provincial-greenhouse-gas-reduction-plans.pdf>

- Budget for climate change research, particularly in pulp and paper industry to reduce the carbon footprint of the sector and enhance the carbon storage potential of BC forests
 - Transportation
 - Greenhouse Gas Reduction (Vehicle Emissions Standards) Act enables the government to legislate emissions standards equivalent to California standards
 - GHG Reduction (Renewable and Low Carbon Fuel Requirements) Act, effective January 2010, introduced 5% renewable fuels content requirement for gasoline and diesel
 - Currently expanding transit system and promoting ridership
 - Buildings and Municipalities
 - >90% of local governments have committed to being carbon neutral by 2010
 - BC Green Building Code, with energy and water efficiency revisions, effected 2008
 - Incentives to audit and retrofit homes and buildings for improved energy efficiency as part of LiveSmart program
 - Local Government (Green Communities) Statutes Amendment Act requires that all community plans and regional growth strategies include GHG emission reduction targets, policies, and actions
 - BC Solar for Schools program encourages local governments to produce zero-GHG electricity
 - Towns for Tomorrow, Smart Development Partnership Program, and BC Local Government Grants program fund projects support sustainable land use planning, community energy planning, and GHG reductions
 - Other Sectors
 - Regulation adopted in 2009 mandates the collection of landfill gas emissions
 - Requirement for all public sector organizations to be 'carbon neutral' by 2010, and to continue for subsequent years, under the GHG Reduction Targets Act
 - Regulation of offset systems
 - New provincially owned and leased buildings must be built to LEED Gold or an equivalent standard
- Significant legislation:
 - Carbon Tax Act (Bill 37): 2008
 - Greenhouse Gas Reduction (Cap and Trade) Act (Bill 18): 2008
 - Greenhouse Gas Reduction (Emissions Standards) Statutes Amendment Act (Bill 31): 2008
 - Greenhouse Gas Reduction (Renewable and Low Carbon Fuel Requirements) Act (Bill 16): 2008
 - Greenhouse Gas Reduction (Vehicle Emissions Standards) Act (Bill 39): 2008
 - Local Government (Green Communities) Statutes Amendment Act (Bill 27): 2008
 - Oil and Gas Activities Act (Bill 20): 2008
 - Utilities Commission Amendment Act (Bill 15): 2008
 - Landfill Gas Management Regulation: 2008
 - Emission Offsets Regulation: 2008
 - Greenhouse Gas Reduction Targets Act (Bill 44): 2007
 - Energy Efficiency Act (RSBC 1996): Current to December 2009