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Regulating Carbon Emissions in Canada

Canadian Carbon Policy Year in Review and Emerging Trends, 2012

Dave Sawyer, Dale Beugin and Philip Gass

Summary

Canadian carbon policy had an important transitional year in 2012. The federal government began to fully assert its vision of carbon policy, while a number of provinces charted new directions in the post-Kyoto era. Canada is moving to reduce emissions, with more policy action in 2012 by the federal government than any previous year. Yet policy trends suggest that federal and provincial greenhouse gas regulatory processes are becoming increasingly complex. A trend toward accommodating the historical patchwork of provincial policy is likely pushing the country down a path of further fragmentation, increasing the risk of high-cost compliance and not attaining Canada's aspirational greenhouse gas targets. Yet early signs of policy coordination and carbon bridges between jurisdictions have begun to emerge, holding promise for efficient policy in the longer term. In this note, IISD recaps Canada's carbon policy year and identifies four key carbon policy trends to watch. A series of policy recommendations for 2013 are also presented.

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2012 Canadian Greenhouse Gas Policy Timeline

| Canada withdraws from Kyoto | Announced: <u>December 2011</u> Official: <u>December 2012</u> |
|---|---|
| Saskatchewan announces environmental code review | <u>January 2012</u> |
| Climate and Clean Air Coalition launched | February 2012 |
| Federal Heavy-Duty Vehicle and Greenhouse Gas Emission Regulations, 2014–2018 (Gazette I) | <u> April 2012</u> |
| Quebec launches new climate action plan and adaptation strategy | <u>June 2012</u> |
| Manitoba launches TomorrowNow sustainability plan | <u>June 2012</u> |
| BC Carbon Tax Review | <u>July 2012</u> |
| Emissions trends report with land use, land-use change and forestry coverage changes | <u>August 2012</u> |
| IISD's oil and gas regulations paper | September 2012 |
| Final federal rules for coal-fired electricity sector (Gazette II) | September 2012 |
| Canada-Nova Scotia Equivalency Agreement on coal-fired energy regulations | September 2012 |
| Minimum threshold change in the federal Greenhouse Gas Emissions Reporting Program (from 100,000 tonnes to 50,000 tonnes CO ₂ -equivalent) | September 2012 |
| Amended Federal Light-Duty Transport Greenhouse Gas Regulations 2017-2025 (Gazette I) | November 2012 |
| Ontario's C <i>limate Change Progress Report</i> and response from Ontario Environmental Commissioner | November 2012 December 2012 |
| Quebec cap-and-trade system regulation released with explicit plans for linkage with California system | December 2012 |
| Newfoundland & Labrador sanctions Muskrat Falls development/ Emera sanctioned purchase of power and cable to Nova Scotia | December 2012 |
| Ontario coal phase-out in 2013 announced | January 2013 |
| First compliance period begins for Quebec cap and trade | January 2013 |

1.0 The Year in Review

1.1 Booting Kyoto, Reaffirming Copenhagen: Global Aspirations Realigned

The year was bracketed by Canada's withdrawal from the Kyoto Protocol. Just hours after returning from COP 17 in Durban, Environment Minister Peter Kent announced in December 2011 that "Kyoto for Canada is in the past" (CBC News, 2011). It was a move that surprised few, given Canada's performance under the protocol, but also officially marked the end of over 15 years of federal and provincial policy maturations notionally aligned to meet "Kyoto Targets." Canada officially was no longer a party to the protocol on December 15, 2012 (United Nations, 2012).

What was perhaps surprising was the federal government's continued affirmation that it would honour its Copenhagen Accord target of 17 per cent below 2005 levels by 2020, or a target of 607 million tonnes in 2020. The prime minister continued to reiterate his commitment to Copenhagen (Chase, 2012), with Environment Canada and Minister Kent now routinely tracking progress on target attainment (Environment Canada, 2012a; Environment Canada, 2012b). Canada's Climate Change Mitigation Plan, announced in May at the United Nations Framework Convention on Climate Change (UNFCCC) meetings in Bonn, also confirmed its commitment to the Copenhagen target, as well as a commitment to harmonize with the United States where appropriate, and develop sector-based regulations while providing incentives for low-carbon technology (Saint-Jacques, 2012).

Canada has also put a significant amount of political capital behind the Climate and Clean Air Coalition (CCAC) to Reduce Short-Lived Climate Pollutants (SLCPs), which was established in early 2012. Though seen by some as a distraction from the UNFCCC process, founding members (including Canada and the United States) continue to reaffirm that the coalition is intended to complement other ongoing multilateral processes. Though still in its early days, it is clear CCAC engagement is a priority for the government (Canada's Action on Climate Change, 2012). In particular, Canada has had a key role in discussions on municipal waste and diesel vehicles under the rapidly expanding coalition.¹

1.2 Federal Carbon Policy Finally Becomes a Reality

With the federal government firmly entrenched with a majority, plans to regulate carbon accelerated through 2012. Efforts were in full swing on the implementation of the government's sector-by-sector greenhouse gas (GHG) regulations. Transport regulations for heavy-duty vehicles were published in Gazette I on April 14 (Environment Canada, 2012d), while an amendment to extend passenger vehicle and light-duty truck regulations from 2017 to 2025 were published in Gazette I on December 8, 2012 (Environment Canada, 2012g). The emerging package of GHG transport regulations stems from joint Canada-U.S. efforts to harmonize policy and minimize cost impacts on the automotive industry (Environment Canada, 2012e).

Electricity sector GHG regulations for coal-fired plants were finalized and published in Gazette II in September (Environment Canada, 2012f). It took just over two years between the initial Notice of Intent (Environment Canada, 2010), the Gazette I draft rule (Environment Canada & Department of Health, 2011) and the final rule in September 2012. Differences between the Gazette I proposal and the final Gazette II rule were evident, especially in the pre-2020 period, where less emission reductions are likely (Partington, 2012). Getting the draft rule "right the first time" through more consultation is perhaps a lesson learned here. At the same time, the federal government accommodated the

¹ The CCAC has grown from six members in early 2012 to 26 individual member states (plus the European Commission) and 24 non-state members as of January 2013. For more information on CCAC, visit http://www.unep.org/ccac/

Government of Nova Scotia's existing electricity policy (2012) in an Equivalency Agreement (Environment Canada, 2012c) that, in effect, defers federal GHG policy for coal-fired electricity to Nova Scotia. The choice by the federal government to defer to equivalent provincial policy rather than preempt the province was a significant development in 2012.

Negotiations with the oil and gas sector were in full swing throughout the year, with draft regulations expected in 2013 (De Souza, 2012). The design of the regulations is still a question, but a system similar to Alberta's Specified Gas Emitters Regulation (SGER) is likely to emerge, with multiple flexibility mechanisms for compliance (Sawyer & Beugin, 2012). However, rumblings at the most senior level of industry with respect to the proposed compliance mechanisms may conspire to slow the publication of a draft rule in 2013. Preferences for carbon taxes may have something to do with this (McCarthy, 2012; van Loon & Mayeda, 2013).

For the remaining large industrial emitters, a series of sector and subsector "tables" were established in late 2012 to enable industry, the provinces and Environment Canada to explore options for regulating other large industrial emitters (the so-called emissions-intensive trade-exposed sectors) (Environment Canada, 2011). While the form and function of these sector tables is still somewhat unclear, provinces and industry express unease over segregated sector and subsector dialogues and a lack of overall coordination. Time will tell if these concerns are founded.

Federal movement was also made in 2012 to require more information on GHG emissions from industrial emitters. The mandatory reporting minimum threshold for industrial GHG emitters changed from 100,000 to 50,000 tonnes CO_2 -equivalent (Environment Canada, 2012h).

1.3 The Politicization of Instrument Choice Deepens

With GHG policy choices forming competing political positions of losing parties in the federal elections of 2008 (carbon tax: Dion) and 2011 (cap and trade: Layton), it was clear that carbon pricing would not form the basis of the emerging federal GHG policy in 2012. Still, the heavy- and light-duty vehicle regulations both included elements of compliance flexibility that enable low-cost compliance, while the emerging federal oil and gas regulations are said to match Alberta's SGER closely, which is a hybrid of performance regulations and economic instruments. And the rebirth of carbon offsets in 2012 as low-cost domestic reductions (LCDRs) held hope for some that the emerging regime would enable a range of low-cost compliance flexibility. But then the federal government's "job-killing carbon tax" refrain (Libby & Nagata, 2012) in September caught many by surprise, casting a shadow of uncertainty over ongoing consultations. The government's position left no doubt that regulation is the word. Still, politics is not always policy and the open question for 2013 is the extent to which compliance flexibility will be accommodated and its effect on emissions levels.

1.4 Provinces Chart their Own Path on Climate Policy

With the federal regulatory process initiated, the majority of provinces in 2012 reached a turning point in their provincial climate change plans. Many climate change plans were coordinated with the Kyoto Protocol timeline, with 2012 as the designated end point. GHG targets may not have been identical to Canada's 2012 target, but the recognition of expected federal action was inherent in several provincial plans.

Many provinces depended on federal intervention, and as a result, when action to address Kyoto didn't come, it negatively affected provincial GHG targets. Despite a move by the federal government to regulate GHG emissions, and perhaps because of it, many provinces moved in 2012 to chart their own path forward to 2020 and beyond. The year saw a series of reviews and new GHG policies emerge:

- Alberta indicated it would be reviewing its SGER, which is set to expire on September 1, 2014, with the goal of strengthening the regulation and likely with the intent of forming the basis for federal equivalency in oil and gas sector regulation (Taylor, 2012).
- British Columbia announced a review of its carbon tax system (Ministry of Finance, British Columbia, n.d.). The outcome of the review will be considered as part of the 2013 budget process. In IISD's response, Gass & Sawyer (2012) advocate retention of the tax at its current rate. A movement to cap and trade saw no support in 2012, while the Pacific Carbon Trust proceded full steam ahead.
- Manitoba released TomorrowNow Manitoba's Green Plan, an eight-year strategic plan for sustainable development. The plan also serves as the launch pad for the development of the province's next climate change strategy (Government of Manitoba, 2012).
- In early January 2013, Ontario announced a full phase-out of coal-fired thermal electricity by end of 2013, which is about equivalent to all coal thermal power in Saskatchewan and Nova Scotia (Ministry of Energy, Ontario, 2013). The Government of Ontario (2012) released a 2012–2020 biodiversity strategy, Biodiversity: It's in Our Nature. The plan includes a number of activities that will include GHG mitigation and biodiversity benefits.
- The <u>Government of Quebec (2012)</u> launched a new 2013-2020 climate action plan and adaptation strategy in June called *Quebec in Action* and released regulations in December to implement cap and trade with California (<u>Séguin, 2012</u>). Quebec is very much "full steam ahead" with its cap-and-trade plans, with not only formal bilateral linking, possibly early in 2013, but with its first joint auction planned for August 2013.
- Saskatchewan launched a major public review of its draft environmental code (<u>Government of Saskatchewan, 2012</u>), which led to a draft code in January 2013 (<u>Ministry of Environment, Saskatchewan, 2012</u>). The review covered all areas of environmental integrity, with GHG emissions management as one of the key topics.
- The partnership between Newfoundland & Labrador and Nova Scotia to develop Lower Churchill clean energy projects moved forward with the approval of federal loan guarantees, and initiation of the review process for the Maritime Link portion. The project will significantly improve Newfoundland & Labrador's clean energy export capability, and assist both provinces in meeting its GHG mitigation targets. The Muskrat Falls hydroelectric project is expected to contribute to 1.2 million tonnes of GHG reductions in Newfoundland & Labrador and assist Nova Scotia significantly in meeting its 40 per cent renewable energy target by 2020 (Government of Newfoundland & Labrador, 2010).
- The Regional Adaptation Collaborative Program between Natural Resources Canada and provincial/territorial governments, with six regional areas of focus (British Columbia, Prairies, Ontario, Quebec, Atlantic, North), reached the end of its formally funded activity in June 2012 (although some collaborative groups remain active). This collaboration enabled provincial governments to boost adaptation capacity and undertake policy-planning activities.²

² For more information on the Regional Adaptation Program, see http://www.nrcan.gc.ca/earth-sciences/climate-change/community-adaptation/regional-collaborative/679. For more information about the six reiogional collaboratives, see http://www.nrcan.gc.ca/earth-sciences/climate-change/community-adaptation/regional-collaborative/657

2.0 Climate Policy Trends to Watch in 2013

2.1 Equivalency Rising: Locally Tailored, Nationally Fragmented

Make no mistake, 2012 marked the beginning of the equivalency era. In 2012 the federal government set an important precedent with the Nova Scotia electricity sector equivalency agreement. In 2013 provinces will be looking to use their own policies, be they regulatory, pricing or some other form, to satisfy the GHG performance requirements of the federal government. The Canada-Nova Scotia Equivalency Agreement has therefore established a pattern of federal policy deferral that is expected to become entrenched in 2013. The splitting of policy responsibility, with architecture provincially tailored but GHG performance standards nationally set, will underscore policy development in 2013. Being the regulatory leader in 2013 will be important to those provinces wishing to drive their own policy agenda.

Provinces will be looking to either use their existing policies or to cherry-pick from proposed federal policies to negotiate locally tailored sector-by-sector equivalency agreements. The emergence of locally tailored regulations will be good for the provinces in that they will accommodate historical action, while reflecting local circumstances and policy preferences. But risks will emerge in 2013 and beyond. Historical policy fragmentation could become entrenched. Uneven provincial policy across emissions will likely increase the risks of imposing higher costs on some while threatening the attainment of the federal reduction target (National Round Table on the Environment and the Economy, 2009). And in an era of equivalency, provincial concerns over capital flight associated with national compliance mechanisms such as LCDRs will hamper their development. The extent to which locally tailored yet nationally fragmented regulations results in high-cost policy is an important trend to watch in 2013.

2.2 Expediency Denied; Regulatory Complexity Rises

Because of their complexity, all significant regulations take time to develop and require multiple years before coming into force (Office of the Auditor General of Canada, 2012). In 2012 two developments conspired to further delay the development of new federal GHG regulations in 2013. The first is the aforementioned equivalency issue, where the federal government may need to negotiate not only with multiple sectors but also multiple jurisdictions. Second, the GHG performance standards are likely to be further specialized by subsectors, process and/or equipment. If this is the case, we can expect a significant lag in policy development in 2013 as regulators and industries grapple with an increasingly unwieldy and complex regulatory agenda.

2.3 "Flex-mechs" on the Menu? Enabling Low-Cost Compliance

In early 2012 there were signs of a shift in federal preferences to accommodate a broad suite of flexibility mechanisms in the emerging performance regulations. But as the year progressed, the politics became entrenched (Cheadle, 2012; Wherry, 2012). The central question for 2013 will be to what extent federal politics impact policy, and which flexibility mechanisms can enable low-cost compliance in the emerging sector regulations. An important test case to watch will be the emerging oil and gas regulations and the extent to which other sector tables follow that lead. Given the 2020 GHG targets set by the federal government, it seems evident that some elements of compliance flexibility, such as emission reduction transfers, price safety valves (tech funds) and LCDRs (or offsets) will be needed to keep costs down. If an ambition gap opens up between now and 2020, where movement to achieve the 2020 targets seems stalled, expect a shift towards greater use of LCDRs to backstop ambition (Sawyer, Stiebert & Beugin, 2011).



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2.4 Carbon Bridges: Tentative Steps Toward Linking Across Jurisdictions

Even as the policy landscape looks more fragmented, early evidence of coordination beyond provincial and national borders also emerged in 2012. First, Quebec's commitment to link its cap-and-trade system with California (Séguin, 2012)—the largest trading system in North America—begins to highlight how carbon costs could be harmonized between different systems and different jurisdictions. Second, backstopping federal regulations with LCDRs could provide an indirect link between regulations for different sectors. If multiple sector-by-sector regulations were to draw on the same supply of LCDRs, the implied cost of emissions reductions required by each sector-level regulation would begin to converge. Finally, while equivalency agreements will likely allow for huge variation in climate policy instruments between provinces in Canada, they also provide a mechanism for coordinating the level of abatement effort sought under equivalent provincial policies. As a result, equivalency could also start to ensure that policies across Canada are imposing similar incentives to reduce emissions.

3.0 Recommendations for 2013 and Beyond

3.1 Learn from a Fragmented Policy Landscape

Overall, the trends point toward increasingly fragmented policy across Canada. As the federal and provincial governments negotiate equivalency, we can expect the historical patchwork to continue. Similarly, a sector-by-sector regulatory approach at the federal level could lead to significant variation in the design of each regulation, as already illustrated by the very different vehicle and coal-fired electricity regulations. This policy fragmentation poses risks in terms of greater complexity and uneven incentives across emissions.

Yet policy fragmentation could also lead to opportunities. Different approaches in different jurisdictions represent opportunities to assess different policy strategies at work. Canada should seek to learn by doing. By monitoring and evaluating different approaches, we can determine the policy approaches that are most effective and most cost-effective in driving down emissions reductions. In the longer term, we will then be better positioned to learn from the best, and implement policy that keeps costs low while moving forward with our emissions reductions aspirations.

3.2 Build on Current Carbon Bridges Toward a Unified, Harmonized Policy

We should not lose track, however, of the long-term policy objective to keep costs low while achieving GHG reduction targets. To do this, a unified, harmonized climate policy both within Canada and beyond its borders will be needed. Mechanisms for coordination of policy, whether through linkage, equivalency agreements or even common LCDR markets, should be nurtured and supported. Quebec's experiment with linking permit trade bi-laterally with California is an important precedent to watch. These first steps toward policy alignment can improve the cost-effectiveness of climate policy overall, allowing policy to achieve more emissions reductions at lower costs.

3.3 Enable Compliance Flexibility

History has shown that Canada's GHG reduction aspirations at both the provincial and national levels are not easily achieved. There is no decreasing trend in emissions like there is in the United States, where natural gas is displacing coal-fired electricity (<u>Burtraw & Woerman, 2012</u>). Instead, Canada will be battling baselines for years to come as industrial growth drives emissions upward relative to a target fixed in time (17 per cent below 2005). Central to policy success, where costs are kept low for a given reduction target, will be continued accommodation for flexibility mechanisms that enable low-cost reductions.³

3.4 Establish Clear Rules in the Meantime

With federal policy development initiated in 2012, there was finally more action than talk. However, 2012 also witnessed the launch of a large and complex regulatory initiative based on discussions between subgroups of industries, provinces, territories and the federal regulator. The rules of this new game are not so clear, leaving uncertainty, confusion and the risk of unintended consequences in the face of increasing regulatory complexity. In 2013 we can expect a sense of rising unease with the emerging system. To address this growing unease, the federal government should seek to provide clarity on issues, including:

³ For an overview of promising flexibility options, see Sawyer & Beugin (2012).



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- A policy vision. A first step in 2013 should be to communicate an overall policy vision. A "north star" will guide many to better understand what is to be expected.
- Equivalency. What are the rules for equivalency? What is equivalent policy architecture? Are equivalent reductions to be measured in tonnes reduced or compliance units, such as technology fund payments?
- Flexibility. What compliance pathways are enabled for whom, and are there enough compliance units to reduce
- Stringency. Who is going to get a light regulatory touch and who is going to shoulder the burden of reductions to close the gap to the 2020 target?
- Point of regulation. Set a merit order for where regulations are to be applied, with a preference to start at the sector level, followed by the subsector, facility and then equipment levels.
- **Timing**. Identify a regulatory schedule for when sectors are to be regulated.
- **Information is always a compliment**. Moving public opinion to support climate policy will be an uphill grind, but increased public acceptance for carbon costs is necessary if targets are to be reached.

Right now, the Lego is strewn across the floor, and what is to be built is an open question. As a result, 2013 is poised to be another critical year for Canadian climate policy, as the federal and provincial GHG regulatory processes simultaneously diverge and converge. Continued engagement and relationship building between both levels of government is essential. As policy evolves, emitters will increasingly seek resolution on who will do what by when. Watch for the answers to these questions; they will affect outcomes well beyond 2013.



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161 Portage Avenue East, 6th Floor, Winnipeg, Manitoba, Canada R3B 0Y4 Tel: +1 (204) 958-7700 | Fax: +1 (204) 958-7710 | Web site: www.iisd.org

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