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Regulating Carbon Emissions in Canada **Climate Policy Year in Review and Trends, 2013**

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February 2014

2013 Canadian Greenhouse Gas Policy Timeline

Ontario phases out coal-fired electricity in 2013	Announced: January 9, 2013 Confirmed: November 25, 2013
Ontario Ending Coal for Cleaner Air Act, 2013	November 25, 2013
Ontario discussion paper on cap and trade for industrial emitters	January 2013
Government of Canada releases final regulations to reduce GHG emissions from Heavy Duty Vehicles	February 2013
<i>National Inventory Submissions 2013</i> report to UNFCCC	April 15, 2013
Alberta and Swan Hills Synfuels end carbon capture and storage agreement	February 25, 2013
Manitoba Greening of Government Vehicles Regulation	March 25, 2013
Manitoba Green Building Regulation	March 25, 2013
B.C. Auditor General report on Pacific Carbon Trust	March 2013
Nova Scotia <i>Amendments to Greenhouse Gas & Air Quality Regulations</i>	June 2013 Consultation Paper September 2013 Royal Gazette II
Manitoba launches process to develop new climate/green plan	July, 30 2013
New England Governors' and Eastern Canadian Premiers' 2012 Climate Change Action Plan renewed	September, 2013
Canada's Emission Trends, 2013	October 24, 2013
Ontario Greener Diesel Notice	November 1, 2013
Quebec regulations linking cap and trade with California	November 13, 2013
Quebec auction of greenhouse gas permits	December 3, 2013

Table of Contents

1.0 The Year in Review	1
1.1 Glossing over the Gap: Federal Action in 2013	1
1.2 Filling the Gap: Provincial Action in 2013	3
1.3 Keystone Politics and the Net Emissions Test	7
2.0 Climate Policy Trends to Watch in 2014.....	8
2.1 Lost Federal Political Will, 2.0	8
2.2 Equivalency Stalled.....	9
2.3 Provincial Policy Labs and Cooperation	10
3.0 Recommendations for 2014 and Beyond	11
Reference List.....	12

1.0 The Year in Review

The 2013 carbon policy year started with promise, carrying momentum from 2012 with federal regulatory work on several fronts including regulations for oil and gas and other industrial emitters. Federal, provincial and territorial sector working groups were busy, oil and gas regulations were being consulted, and discussions were in full swing to enable provincial policy under equivalency agreements under the Canadian Environmental Assessment Act. While the sector-based regulations were not first-best economy-wide carbon pricing, nor was stringency likely to align with 2020 targets, there was a real sense that Canadian carbon policy was finally moving forward in the early part of 2013.

However, as 2013 progressed, this process began to stall. This was not initially surprising given the complexity of developing a number of separate sector-by-sector regulations while also trying to accommodate provincial policy under equivalency agreements. But the evaporation of federal political will in late 2013 leads many to question just what will ultimately be accomplished by all the work that went into the federal sector-by-sector regulatory approach throughout 2013.

Several provinces continued to move to fill the policy gap in 2013, with notable advances by Ontario on coal-fired electricity, and the launch of Quebec's cap-and-trade system with permit linking to California. B.C.'s commitment to "stay the course" after an extensive carbon tax review was also notable in 2013, as was the emergence of a provincial and territorial dialogue to discuss common carbon policy issues. This important effort builds on relationships forged through bodies such as the Western Climate Initiative (WCI) and was entrenched due to a shared need to piece together the compartmentalized federal regulatory process. In 2013 the subnational dialogue became routine and work was initiated to look for opportunities for standardization across provinces on policy elements such as greenhouse gas (GHG) accounting.

And then there was the Keystone effect. Obama's June 2013 speech linking Canada's GHG policy to market access in the United States formalized what many had said for years—that a good GHG policy is economic insurance. Still, the United States blustering on Keystone XL has to be considered in context given that U.S. oil and gas GHG emissions are well above Canada's and regulating GHGs for the sector is not on the radar during Obama's term.¹ Still, it became clear that Canada's market access aspirations became captive to uncertain U.S. GHG preferences and politics in 2013.

What is in store for 2014? Trends from 2013 suggest that once again we should not expect much federal GHG regulatory action. The development of federal and provincial equivalency agreements will most likely stall due to administrative complexity and, more importantly, an erosion of federal political will. As in the past, look to the provinces to innovate, drive policy and move Canada's GHG yardsticks forward in 2014. Federal action on top of provincial efforts will be a bonus in 2014.

1.1 Glossing over the Gap: Federal Action in 2013

The year ended with Canada putting its best foot forward internationally with a listing of *Facts on Canada's Climate Change Action* (Government of Canada, 2013.) Centre stage in the listing of actions to date is *Canada's Emissions Trends report, 2013* (Environment Canada, 2013), which highlights that Canada has reduced emissions by 4.8 per cent since 2005 and is on a path to achieving roughly half its 2020 Copenhagen target, having reduced 128 megatonnes (Mt).

¹ To be fair, there are scenarios in which the United States could meet its 2020 target without addressing oil and gas this term. That said, most of the talk from the United States on addressing emissions from oil and gas seems to be directed at Canada's oil sands.

While Environment Canada should be commended for its transparency in GHG reporting, and routinely updating its forecast and progress to its 2020 target, the remaining 127 Mt gap and the suggested further delay in oil and gas regulations have led many to continue to brand Canada as a GHG laggard.

The absence in 2013 of long-awaited oil and gas GHG regulations in the Canada Gazette I (CG1) did not help the perception of inactivity. Many had thought both the architecture and the stringency of the proposed regulations were all but set, with publication in CG1 imminent in 2013. Indications throughout the year for the draft regulations was something close to a 30 per cent emission intensity standard with a CAD\$30² technology fund (the 30-30 proposal), which could deliver 32 Mt of compliance at an average cost of \$24 per tonne and a total cost before tax and royalty interactions of about \$770 million.³ Our earlier analysis more or less [aligns with published](#) reports of expectations from those involved closely with the consultations, with industry costs per barrel in the order of \$0.38 to \$0.72 (Greenpeace, 2013). That said, stringency would likely vary by economic sector, with petroleum refining likely subject to a much lower intensity target, and offshore oil and gas perhaps facing much weaker guidelines seeking a commitment to follow best practices.

But publishing the regulations in CG1 was not to be, as political winds changed markedly. In late 2013, the Environment minister was unwilling to provide a new timetable for publication and perhaps more ominously, the prime minister, in his year-end interview, indicated oil and gas [emissions rules are on hold](#) and could be years away (Wingrove, Leblanc, & McCarthy, 2013).

Another surprise at the end of the year was reports that Environment Canada was taking the technology fund off the table as a federal compliance pathway due to its incompatibility with the Canadian Environmental Protection Act. Technology fund payments are a major compliance channel for the oil and gas regulations in Alberta's Specified Gas Emitter Regulations (SGER), with upwards of a third of compliance coming from technology fund payments under a 30-30 proposal (Sawyer & Beugin, 2013). Indeed, many provinces continue to look to a technology fund mechanism to help incent short-term reductions and innovation in low-emitting technology, while adding price certainty to compliance. Uncertainty over how provincial technology funds could be enabled under federal oil and gas regulations could be one element delaying the publication of oil and gas GHG regulations.

Consultations between the federal and provincial governments and the remaining industrial emitters, or the emission-intensive trade-exposed sectors, continued throughout the year in parallel to the oil and gas regulations. Indications are that progress was made in 2013 on performance standards for emissions from ammonia and nitric acid production, ethanol and ethylene plants with CG1 proposals possible in the new year.

In December 2012, Environment Canada also published the proposed Regulations Amending the Passenger Automobile and Light Truck Greenhouse Gas Emission Regulations that would establish GHG emission standards for light-duty vehicles of model years 2017 and beyond. These proposed regulations build on the existing Passenger Automobile and Light Truck Greenhouse Gas Emission Regulations for the 2011-2016 model years. The existing regulations will result in a reduction of 92 Mt of CO₂ equivalent emissions over the lifetime operation of vehicles produced in the 2011-2016 model year cohort. The proposed regulations for 2017 and later model years would result in a reduction of approximately 163 Mt of CO₂ equivalent emissions over the lifetime operation of vehicles produced in the 2017-2025 model year cohort. The proposed Regulations Amending the Passenger Automobile and Light Truck Greenhouse Gas Emission Regulations for model years 2017 and beyond are expected to be finalized and published in 2014.

² All dollar amounts are in Canadian currency unless otherwise indicated.

³ Based on analysis contained in Sawyer and Beugin (2013).

The federal government continued to engage at the international level through the United Nations Framework Convention on Climate Change (UNFCCC) negotiations, with a change in leadership at senior levels within Canada's delegation. Climate finance was significantly reduced over the period as the fast-start commitment came to an end, a common position for many developed countries. Still, new international climate finance was announced in 2013 that included [\\$12.5 million in federal funding](#) for the [Climate and Clean Air Coalition for Short-Lived Climate Pollutants](#) and the [Climate Technology Center and Network](#) (Environment Canada, 2013b). Work also started in developing a post-2020 GHG target for the country to be brought forward by Canada prior to the first quarter of 2015.

1.2 Filling the Gap: Provincial Action in 2013

The year saw some major successes, notably the launch of Quebec's emission trading scheme and Canada's first carbon auction. A review of B.C.'s carbon tax reaffirmed the status quo, while Alberta looked to federal regulations to help create space for its SGER review. Ontario moved on cap and trade and biodiesel regulations while many provinces shifted their attention to thinking about how booming resource development might fit with GHG policy aspirations.

With a multifaceted federal process looking increasingly complex and uncertain as the year progressed, provinces found themselves talking more and more with each other to piece together an incoherent picture. In the process, they found some common ground and established an ongoing carbon policy dialogue, with the help of the International Emission Trading Association. The rise of the provinces as a more coherent group that is looking for ways to work together on the foundational elements of carbon policy was a big outcome in 2013.

British Columbia confirmed it [would keep its carbon tax](#) after a 2012 review received over 2,200 submissions (Ministry of Finance, Government of B.C., 2013). Carbon tax rates are to be held steady at \$30 per tonne, with no changes to the revenue neutrality provisions that recycle proceeds back through reduced household and corporate income. The only notable change was a tax exemption for farmers who use coloured gas and diesel under the Motor Fuel Tax Act, worth \$11 million annually starting in January 2014. The government also extended its [Clean Energy Vehicle Incentive](#) program, offering up to \$5,000 in incentives on the price of a new vehicle or home charging unit (Government of B.C., 2013).

The Climate Action Secretariat, the main hub for B.C. climate action within the bureaucracy, was rolled into the Ministry of Environment while the Pacific Carbon Trust was dissolved. In both cases, [cost savings were cited as the reason](#) (Moore, 2013), but in the case of the Pacific Carbon Trust, a [scathing audit](#) and ongoing controversy about [public institutions buying credits](#) from corporate emitters likely had much to do with the move (Auditor General of B.C., 2013; Canadian Press, 2013a).

Also of note in B.C. was the resurrection of the [Pacific Coast Collaborative](#), bringing together B.C., California, Oregon and Washington on issues of carbon policy. In October, members signed the [Pacific Coast Action Plan](#) on Climate and Energy. Under the action plan, B.C. will maintain their existing carbon pricing programs along with their respective clean fuel standards, while Oregon and Washington have committed to moving forward on a suite of similar policies (Pacific Coast Collaborative, 2013). Efforts are underway to help both Washington and Oregon to explore the implications of carbon pricing, thus smoothing over misaligned carbon costs among the highly integrated Pacific economies.

Finally, in B.C. the tensions between government enthusiasm for liquefied natural gas (LNG) exports and its climate leadership [came to the fore in 2013](#) (Meissner, 2013). With rising electricity price forecasts coupled with low natural gas prices, powering LNG terminals by natural gas looks increasingly certain. This then puts significant upward pressure on GHG emissions, as each LNG plant emits in the order of 2 Mt of GHGs annually. Given the scale of development anticipated, it is not hard to see the tension between LNG exports and attaining B.C.'s stated GHG targets. Perhaps offsets are the answer for reconciliation.

Alberta began its review of the SGER, which expires in September 2014. Word throughout the year was that Alberta was looking to increase the stringency of the SGER under the umbrella of a federal equivalency agreement. As it became clear the federal government would not move in 2013, Alberta seemed to become [increasingly frustrated](#), but then [sent mixed signals](#) by implying that movement was contingent on alignment with the United States (Plenty, 2013; Wood, 2013). Since there are no plans in the works to regulate oil and gas emissions in the United States anytime soon, Alberta's public position was somewhat puzzling.

The SGER continued to be an ongoing concern, with [new offset protocols](#) for biomass and carbon capture and storage (CCS) finalized in 2013 (Carbon Offset Solution, 2013). This is in addition to the 34 protocols already approved. The Climate Change and Emissions Management Corporation (CCEMC, 2013) continued its shift away from funding CCS projects in 2013, with [\\$46 million committed](#) to eight new renewable energy projects. As of late 2013, the CCEMC had recycled technology fund payments into 51 projects with a total investment of \$1.3 billion since inception. Still, CCS took a hit in Alberta in February, with the provincial government and Swan Hills Synfuels [announcing they agreed](#) to discontinue the CCS funding agreement (Government of Alberta, 2013).

The appointment of an [associate minister of Electricity and Renewable Energy](#) was unique in Canada and perhaps a forward-looking shift in Alberta.

Saskatchewan continued to work towards adopting SGER-style regulations for 2015 under the [Management and Reduction of Greenhouse Gases Act](#), including ongoing discussions with the federal government over equivalency. Many had expected the act and associated regulations to be proclaimed in 2013 but it was not to be. The federal equivalency processes likely explained the delay, as the province took a "wait-and-see" approach to new federal regulations. A misalignment of stringency between federal and provincial ambition did not help provincial movement, as industry sought to lessen the provincial emission reduction ask to better align with the light touch emerging under the federal process.

One highlight was clearly the [\\$1.1 billion announcement](#) for the Boundary Dam CCS project.

Manitoba moved to both turn the page on its 2008 Beyond Kyoto climate plan and to develop a new climate change plan starting with consultations in 2013. Under the Beyond Kyoto plan, Manitoba did not achieve its [mandated target](#) of 6 per cent below 1990 levels by 2012, with emissions coming in at 19.5 Mt in 2012, approximately [12 per cent above 1990 levels](#). Yet a series of measures likely did deliver reductions in the order of 2.9 Mt (Government of Manitoba, 2014).

In 2013 Manitoba published a [Greening of Government Vehicles Regulation](#) governing fuel-efficiency standards for government vehicles as well as a [Green Building Regulation](#) for government-funded owned or leased buildings. Both are adopted under the Climate Change and Emissions Reductions Act and set standards for lower emission intensity in government operations.

Ontario moved to entirely phase-out coal-fired thermal electricity by the end of 2013, with announcements in January confirmed in November that Lampton and Nanticoke would shutter, putting the final nail in a long-time provincial promise to get out of coal. Nanticoke was once the largest GHG emitter in Canada with over 17.6 Mt emitted in 2005, but efforts to slow coal use had reduced this to about 2.8 Mt in 2011. Lampton emitted 8.7 Mt in 2005 and just 1.25 Mt in 2011 (Environment Canada, 2005). All told, Ontario's coal-fired electricity ban likely resulted in about a 15 Mt reduction since 2005 (assuming natural gas fills in some of the load growth), the largest single regulatory action in North America.⁴ Ontario also introduced a bill in the legislature that would ban coal use in the future, the [Ending Coal for Cleaner Air Act, 2013](#).

In a surprise move early in the year, Ontario released a [discussion paper](#) on cap and trade for industrial emitters (Government of Ontario, 2013b). The move signalled that the province was contemplating cap and trade, with language in the document focused on designing a robust system that includes flexible compliance options and offsets. Industry consultations occurred throughout the year while the Ministry of Environment assessed alternative design options such as allocations, data collection and benchmarking emissions identity. Given the minority parliament in Ontario, politics matter and whether the government can move the proposal forward remains an open question.

IISD provided [comments](#) on Ontario's discussion paper. Our modelling suggested that compliance costs for industrial emitters could be below \$15 per tonne in 2020 with a 7 per cent reduction, or 3 Mt below 2020, in industrial emissions (Sawyer & Gass, 2013). We also noted that the proposed stringency of the policy could likely be increased somewhat while not driving adverse competitiveness impacts. Finally, we cautioned that permit allocations have a greater impact on cost outcomes than the compliance target, and care is needed to avoid adverse competitiveness outcomes, but also to avoid overcompensating firms through free allocations.

Ontario also posted on the Environmental Registry [a new renewable content standard for greener diesel](#) and home heating oil that goes beyond the 2 per cent federal content standard already in the Canada [Gazette II](#). Starting in April 2014, fuel suppliers will be required to demonstrate a 2 per cent content standard that will then have an average blend of 4 per cent post-2016. Interestingly, the content standard is tradable (balance sheet transfers), similar to Ontario's Ethanol in Gasoline Regulation (O.Reg. 535/05). According to the posting, about 1 Mt of reductions can be expected annually once fully implemented in 2017 (Government of Ontario, 2013a).

Quebec's cap-and-trade system came into full swing in 2013 with a number of regulations. The [cap-and-trade](#) regulations released identify [covered entities](#) and [enable full linking with California](#) on January 1, 2014 (Government of Quebec, n.d.; Government of Quebec, 2013b). Perhaps the biggest news of the year was Canada's first permit [auction](#) by Quebec in early December. The lack of a short-term compliance obligation in 2013 meant that the auction was undersubscribed with just 1 million of the 2.97 million tonnes of 2013 vintage units bought at the floor price of \$10.75. Another 1.7 million 2016 vintage units were purchased. Total auction proceeds were \$29 million, all of which is to be used to fund Quebec's [Climate Change Action Plan](#) (Government of Quebec, 2013a). Auctions are likely to take place once per quarter, as in California, with the next auctions scheduled for March 2014. A joint auction with California is planned for June 2014.

In 2013, Quebec also launched a [new economic policy](#) with a heavy focus on cleaner technology and low-carbon development. Embedded are a number of initiatives to promote the electrification of the Quebec economy.

⁴ In 2005, Nanticoke, Lampton, Lakeview and Atikokan released over 28 Mt (Environment Canada, 2005).

Nova Scotia amended its [GHG Emissions Regulations](#) in September, extending the schedule of emissions caps for coal-fired electricity to 2030 as part of its equivalency agreement with the federal government (Government of Nova Scotia, 2013a). With the amendments to its GHG regulations for electricity, and in conjunction with its [2010 Renewable Electricity Plan](#), Nova Scotia now has 87 per cent of its 2011 industrial emissions covered by GHG policy (Government of Nova Scotia, 2013b).

Outside of electricity, the rapidly changing industrial landscape is complicating policy-making. Change is the word, with the closure of the Dartmouth refinery in 2013 reducing about 700 kilotonnes (Kt) or 7 per cent of all industrial GHG emissions (Environment Canada, 2005). Fuel switching to natural gas in pulp and paper will also likely drop the number of emitters over the 25 Kt reporting threshold that is the probable trigger for future federal regulatory action. Looking forward, policy-makers are grappling with a number of high-probability developments that will radically change the GHG landscape in petrochemicals, LNG exports and onshore and offshore oil and gas production. Planning for growth and decline seems to be a challenge in the foreseeable future for Nova Scotia.

A first round of municipal climate change action plans were submitted to the province on December 31, 2013, highlighting municipal efforts on adaption and mitigation.

New Brunswick reviewed its climate action plan in 2013, with consultations completed and documents sent to cabinet for approval. According to provincial representatives, New Brunswick will likely “stay the course” on mitigation, with a continued focus on its renewable portfolio standard (40 per cent by 2020) and a target of 75 per cent of generation from non-emitting electricity by 2020. Shuttering heavy fuel units has also helped keep electricity sector emissions down. Energy efficiency continues to be a big push, with analysis and modelling completed throughout the year to assess costs and potentials.

Clearly, fracking politics dominated the scene, with anti-fracking protests making the future of shale-gas development and associated emissions unclear in the province.

Newfoundland and Labrador (N&L) had a number of energy developments in 2013 that will likely alter GHG emissions going forward. Notably, the Muskrat Falls loan guarantee was [announced in late December](#), securing \$5 billion over 40 years to support the \$7.7 billion hydroelectric project (Canadian Press, 2013b). This and the approval by the Nova Scotia Utility and Review Board of the \$2.5 billion Maritime Link were major milestones for energy development in 2013. Within N&L, the Muskrat Falls project will likely facilitate the closing of the Holyrood Thermal Generating Station, which released 730 Kt in GHG emissions in 2011 (Environment Canada, 2005). However, with large offshore oil and gas finds and mining sector development highly likely, the GHG space created by the eventual loss of Holyrood will likely be offset. The 900 Kt-emitting North Atlantic Refinery is also for sale, leaving a question about this major emitter.

In 2013 N&L looked to the federal equivalency discussion for signposts of where to go with GHG policy for its large emitters. As one of the only provinces without enabling GHG legislation, a central question was whether or not to develop provincial legislation that would enable equivalency. With the federal system stalling, and indications that offshore oil and gas facilities will not face regulated emission reductions beyond improved work practices, the need for enabling legislation in N&L will likely dwindle.

1.3 Keystone Politics and the Net Emissions Test

The environment crashed Canada's market access party in 2013, with [President Obama in his June speech](#) linking Canada's GHG performance with the potential economic benefits of Keystone XL (Goodman, 2013). The Keystone effect was about the U.S. finger wagging over a Canadian GHG policy vacuum and rising oil sands emissions. While it was unclear just what sort of test could satisfy the president's language of "not significantly exacerbate" and "net effects," it was clear that Keystone approval was now captive to uncertain U.S. preferences and politics. Never mind that U.S. oil and gas GHG emissions in 2012 were 217 Mt with production rising rapidly, which is still above the current forecast of 200 Mt for all of Canada's oil and gas in 2020 (Energy Solutions Forum, 2013; Environment Canada, 2013a; U.S. Environmental Protection Agency, 2013b).

Those reading the tea leaves on Keystone's "net effects" were confused by U.S. federal proclamations. The [U.S. Department of State \(DOS\)](#) (Department of State Bureau of Oceans and International Environmental and Scientific Affairs, 2014) and the [U.S. Environmental Protection Agency \(EPA\)](#) (2013a) published opposing views on the potential GHG impacts. [DOS suggested](#) that the pipeline would not significantly affect emissions (U. S. DOS Bureau of Oceans and International Environmental and Scientific Affairs, 2014), while the EPA argued that liquid fuel developed from oil sands bitumen has greater life-cycle emissions, suggesting that upstream emissions matter, even if they are outside of the United States.

While Obama was being praised for bold talk, those looking for opportunities to harmonize Canada and U.S. GHG policy found little common ground. With vehicle standards already aligned, and perhaps some future movement on harmonizing energy-efficiency standards, the U.S. focus in the foreseeable future will be on a sector Canada already regulates, coal-fired thermal electricity. With resistance to economy-wide carbon pricing in Congress, Obama is seemingly following Canada's sector-by-sector GHG playbook by regulating sectors based on their national contribution to emissions, or the so-called mitigation wheel. Issues of [compliance flexibility and equivalent state policy](#) read a lot like equivalency issues in Canada as the EPA looks to defer GHG policy implementation to states under the [Clean Air Act's Section 111\(d\)](#) (Wannier, Schwartz, Richardson, Livermore, Gerrard & Burtraw, 2011). But unlike Canada, litigation will likely slow the process at both the federal and state levels for some time to come, creating a patchwork of state policy leaders and laggards.

California's cap-and-trade program became a policy beacon in 2013. As one [commentator observed](#), auctions have run smoothly, allowance prices have remained stable and reasonable and compliance entities are participating (Reyna, 2013). As well, allowances are selling, official [offsets](#) have been issued, Quebec [linkage](#) will begin in January and legal uncertainty has been lifted.

Five quarterly auctions have been completed since November 2012, with proceeds totalling about \$530 million and a 2013 market clearing price of \$11.48 and 2016 price of \$11.10. Indications are that competition for the allowances has been strong, with qualified bidders numbering in the 70 to 90 range. The latest auction in [November 2013](#) sold out, with bids outstripping supply by a factor of two (California Air Resources Board, 2013).⁵

With Quebec and California linking a reality in 2014, the foundation for more jurisdictional carbon bridges was firmly established in 2013.

⁵ Market participation in the November 2013 auction was competitive as indicated by a Herfindahl-Hirshman Index of 693; futures are moderately competitive as indicated by an index of 1,165.

2.0 *Climate Policy Trends to Watch in 2014*

We identify three important climate policy trends in 2014: a loss in federal political will, stalled equivalency and an abundance of provincial policy labs.

2.1 **Lost Federal Political Will, 2.0**

Expect further regulatory delays in 2014 as the federal political will in 2011 that initiated the sector-by-sector process evaporated in 2013. The poster child for this inaction are the oil and gas regulations, which many believed were imminent. Throughout 2013, consultations were progressing with reports that both policy architecture and stringency were more or less agreed. But then the regulations did not emerge, and worse, political signals implied they could be delayed for years, with no set timetable for a Notice of Intent, never mind publication in the Canada Gazette 1.

There is much conjecture about why the oil and gas regulations continue to stall. A front-running theory is that the SGER, despite being a world-leading carbon policy, gained the sector zero social license. If this is the case, so this line of reasoning goes, why further misalign carbon costs with the booming U.S. oil and gas sector under a 30-30 proposal? And with Obama providing faint signals on Keystone XL approval, there is nothing to be gained from federal regulations that increase stringency to 30-30. This line of thinking has become a central talking point for those opposed to regulation, drowning out those in industry who still think a more stringent national GHG policy would help with U.S. approvals and social license at home. Still, it is hard to see how a more stringent SGER, applied nationally to more entities, could help with so many equating oil sands with a global climate change catastrophe. Indeed, for oil sands operations in 2014, a lack of a global license to operate is the baseline.

A less depressing view on why the oil and gas regulations stalled is that the regulatory process was more complex than many had imagined. One ongoing concern, which past IISD modelling validates, is that with a 30 per cent intensity standard the oil and gas sector would be extremely reliant on compliance flexibility such as technology fund payments, trading and offsets. But there are administrative challenges to setting up a national offsets system and significant provincial concerns over capital flight as permits are bought and sold. And the Canadian Environmental Protection Act (CEPA) is now interpreted to be unable to recognize compliance units paid to a technology fund, which points to provincial technology funds set up independent of the CEPA. Absent certainty on compliance flexibility, the sector would be hard pressed to meet the legally binding intensity standard under the CEPA. It is plausible that until compliance flexibility is trued up, there is reluctance to go to Canada Gazette 1 with a proposed rule. Still, most regulations take years before binding on emitters, and so this line of reasoning seems insufficient to entirely explain the delay.

In 2014 we can expect uncertain timelines for GHG regulations for oil sands and refining, with offshore oil and natural gas likely further behind. Indeed, we expect that work plans and timelines were significantly revised in late 2013. Still, we could see some emission-intensive and trade-exposed (EITE) regulations emerge in early 2014, notably ethylene, ammonia and nitric acid production, and ethanol. But all indications are that these are not asking for reductions much below baseline emission intensity.

2.2 Equivalency Stalled

Equivalency in 2012 emerged as the path forward to enable the diverse provincial GHG policies to coexist under emerging federal GHG intensity standards. In 2013 equivalency stalled. Expect equivalency to remain stalled through 2014 as complexity, uncertainty and a lack of political will threaten progress.

A mix of factors conspired to put the brakes on equivalency, starting with complexity. First, there is bureaucratic complexity with the sector-by-sector process bogging down into one big entanglement with little overall guidance on how all the moving parts fit together. Each process working group is seemingly working in isolation against a backdrop of provincial equivalency, but it is increasingly clear there are too many moving parts and too many unresolved questions to sustain momentum.

Second, the design of the equivalency agreements themselves are complex. The Nova Scotia single-sector coal-fired electricity agreement has proven of limited use to most provinces that are contemplating multi-sector or macro-agreements to align with economy-wide policies such as B.C.'s carbon tax, Quebec's cap and trade or Alberta's SGER. A multi-sector approach raises a whole host of issues that require new thinking on:

- Authorities, the necessary elements of equivalency agreements and how they are enabled.
- Administration, including roles, responsibilities and reporting obligations
- Policy design, including questions of stringency, point of regulation, coverage, compliance, multi-sector true-up and timing.

Designing equivalency agreements to accommodate multiple sectors will take time given the complexity involved.

Uncertainty will add to equivalency remaining stalled in 2014. Designing equivalent policy can only go so far absent central guidance on the level of stringency required for each sector and the elements of equivalent policy. Planning for equivalent intensity standards simply cannot happen without sector intensity benchmarks from which to design provincial policy that would be deemed equivalent.

With the threat of federal regulations reaching into the provinces, there was a case to move provincial action forward to preempt federal regulations and define policy in the provincial interest. But with the federal threat all but evaporating in 2014, it will be increasingly difficult to push provincial action forward in 2014. Absent clear direction from the Prime Minister's Office, provincial environment departments will have a hard time pushing new GHG policy through provincial legislatures in 2014. It is hard to see a path forward without clarity and indeed a more credible threat from Ottawa.

Further stalling equivalency is perceived as a light regulatory touch for the EITE sectors. A number of provincial and industry stakeholders have confirmed that the EITE intensity standards under discussion have a level of stringency that is close to business-as-usual projections. From an industry perspective, this light federal touch provides a wedge to argue against more ambitious provincial action. For the provinces, sector regulations that essentially reinforce business-as-usual emissions impose little cost, negating the impetus for developing time-consuming and complex equivalency agreements. For the federal government, perhaps a light regulatory touch provides a simple solution to disentangle the sector-by-sector regulatory process that essentially became unwieldy in 2013.

In 2014 we can expect all kinds of busywork on offsets design, establishing baselines and “new thinking” on a path forward. But with the combination of complexity, uncertainty and a lack of political will, equivalency will likely stall in 2014.

2.3 Provincial Policy Labs and Cooperation

A provincial climate policy dialogue emerged in 2013, catalyzed by the International Emissions Trading Association. Communication became increasingly important to the provinces in 2013 as they pieced together the compartmentalized federal sector-by-sector process. In 2014 we can expect the dialogue to mature and become more issue focused. This dialogue provides an important forum for the provinces to move closer together on carbon policy, especially absent action by the federal government.

Emerging from the dialogue is an interest in exploring [linking by degrees](#) (Burtraw, Palmer, Munnings, Weber & Woerman, 2013), which recognizes a need, absent unified federal policy, to incrementally align elements of subnational carbon policies. The backdrop for interest in linking by degrees is both an eye on federal equivalency and a recognition that standardization is needed in some key areas, notably carbon accounting and offset protocols. To the extent that provinces can start to align some elements of policy, the risk of high costs under fragmented provincial systems is somewhat mitigated.

The provincial dialogue on developing consistent administrative requirements and rules between jurisdictions is a mundane yet important trend to watch in 2014.

3.0 Recommendations for 2014 and Beyond

Over seven successive federal climate plans, starting with the Green Plan of 1990 and continuing with the current sector-by-sector approach, federal governments have initiated processes to move forward. Then, as the processes matured and costs became almost real, political will evaporated, taking with it the expectations of emitters that investments in low-emitting technology would pay later. In the decades of federal inaction, a patchwork of diverse provincial policies and programs now exist.

Against this backdrop of federal inaction and provincial patchwork, it is perhaps time to embrace policy fragmentation within the federation. The path forward for 2014 and beyond is therefore one of seeking provincial alignment to minimize long-term administrative and compliance costs. Recommendations for 2014 and beyond include:

- **Embrace fragmentation, seek opportunities for subnational alignment.** While the economist's first best policy is unified national carbon pricing, the political will to back the policy has never been there. As such, the provinces need to continue the dialogue that blossomed in 2013 and continue to look for ways to align foundation elements of their policies. The federal regulatory process deserves some serious credit here for enabling an equivalency discussion that catalyzed the provinces and territories to stop and look at their individual policies from an alignment lens. Looking for opportunities to "link by degrees" is the path forward to set up systems now that can minimize misaligned GHG policy later. Looking to align GHG accounting and offset protocols is a logical first step. Thinking about building subnational carbon bridges toward more standardized subnational policy is the long-term objective.
- **Design equivalency to be flexible in the long term.** While equivalency will likely stall in 2014, it still holds a longer-term opportunity to establish national emission intensity standards while accommodating increasingly entrenched and diverse provincial policy. But the key to long-term, cost-effective GHG policy is to accommodate increasingly stringent GHG ambition and accommodate updating to address economic growth and decline. At the extreme, flexibility also means equivalency agreements may need to be abandoned should they impede the alignment of subnational systems, or if they become too complicated in practice.
- **Accommodate and embrace provincial policy labs and innovation.** With a provincial process underway to share experiences and at least talk about common carbon design, there is an opportunity to learn and share. Like it or not, the federation has now an entrenched set of very different subnational carbon policies, supported by a smattering of federal sector regulations. Learning from our provincial policy labs and building on successes now need to be ongoing objectives of those helping to shape future policy. If we have learned anything about carbon policy in Canada, it is that top-down national systems are lost to the federation and we need to embrace bottom-up subnational systems. The trick to resilience is to look to long-term alignment.

In 2012 the carbon policy Lego was strewn across the floor waiting to be built. In 2013 we walked on it with bare feet. Looking forward to 2014, one has to wonder if the Lego will be put back in the box and forgotten in the basement until yet another federal plan emerges. In the meantime, look to the provinces to take it upon themselves to start building something from all of the pieces.

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Published by the International Institute for Sustainable Development.

International Institute for Sustainable Development

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