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Clean Energy and Climate Action: A North American Collaboration

Expert Dialogue

Synthesis Report

May 2010

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the PEMBINA institute
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1.0 Introduction

The **Clean Energy and Climate Change Action in North America: A North American Collaboration** project is being jointly undertaken by IISD and the Pembina Institute. The goal of the project is to facilitate a productive Canada-U.S.-Mexico "blended conversation" on climate change and energy among influential decision-makers.

A key activity over the past year was a series of expert dialogues aimed at providing regional perspectives on North American energy and climate issues. The dialogues have provided key inputs for the preparation of the policy papers and represented an important opportunity to engage with experts from industry, academia, governments and civil society.

Location	Date	Topic	Partner Institution
Vancouver, BC	May 25, 2009	Carbon Pricing in a North American Context	-
Calgary, AB (I)	May 26, 2009	Carbon Capture and Storage and Carbon Management	-
Calgary, AB (II)	May 26, 2009	Renewable Energy	-
Mexico City, MX	August 3, 2009	Cap and Trade, Institutional and Financial Mechanisms	The Centre for Center for Dialogue and Analysis on North America (CEDAN) and the Instituto Nacional de Ecologia (INE)
Washington, D.C.	September 22, 2009	Opportunities for Cooperation Emerging From the North American Leaders Summit	Peterson Institute for International Economics
Toronto, ON	March 17, 2010	US-Canada Energy Relationships and the Transition to Clean Energy	Canadian International Council (CIC)

The expert dialogues were subject to Chatham House rules (meaning that participants' comments are not identified by either name or affiliation).

This report provides an overview and synthesis of the dialogues. It draws out common themes across the dialogues, and identifies areas of similarity and/or divergence on a set of key issues.

Common themes identified in the expert dialogues included:

- There are several unknowns in the North American climate change policy arena, and we are in a time of political and policy uncertainty. Specifically, while it is clear that a clean energy agenda will continue to be promoted for reasons related to future prosperity, jobs and energy security, it is not as clear how strongly North America will go ahead in developing a strong regulatory framework or price signal on carbon.

- In the absence of national legislation in the United States, collaborative opportunities outside of linked carbon pricing systems must not be overlooked. In addition, many unilateral activities could be undertaken in Canada that would not carry strong competitiveness implications.

- Investment in clean energy within the United States is increasing at an encouraging rate. Aside from a few notable exceptions, similar opportunities are not being acted on to the same degree in Canada. The two countries lack coordination between them on financing and policies that support cooperative clean energy development.

- State- and provincial-level initiatives (particularly with regards to energy and electricity grid issues) may very well be key policy drivers. Individual American state interests and differing provincial/state interests in Canada and Mexico add a complex layer to any considerations of domestic, let alone continental, policies.

2.0 Key Areas for Cooperation and Potential Policy Gaps

A number of key areas for climate change and clean energy action in North America have been identified as part of this project, and these themes were discussed in all expert dialogues.

2.1 North American energy relationships

The broad theme of North American energy relationships includes the changing nature of the energy relations and grid issues, existing and new institutions and the policy-making process. Also considered here is the role of regional (i.e., state- and/or provincial-level) initiatives.

The continental energy relationship among Canada, the United States and Mexico is essentially a microcosm of international relationships in that we have a developing country (Mexico), a major energy exporter (Canada), and a major consumer and emitter (the United States). As such, dynamics between the three countries are extremely complex on a variety of energy and climate change issues.

Participants in all dialogue sessions recognized the unique nature of the North American context. Dialogues in early 2009 carried a sense of hope that there was potential for significant changes at the national and international levels in the short term. The passing of the American Clean Energy and Security Act (Waxman-Markey) by the House of Representatives in June 2009 was seen as a continental turning point, leading to increased expectations; but hopes for a comprehensive international outcome from COP 15 in Copenhagen were tempered as 2009 drew to a close. The final dialogue in March 2010 indicated expectations of considerable uncertainty over 2010, at both the national and international levels. The prospect of a climate change bill in the United States this year appears slim. Many dialogue participants across North America noted that while U.S. legislation (or lack thereof) is a major element in the continental relationship, there are opportunities for cooperation and collaboration that must be taken advantage of in the absence of a national (or continental) carbon pricing framework.

As such, critically assessing the costs and benefits of cooperative actions, particularly as related to energy policy, was a key issue noted through the dialogues. Many participants (particularly in Canada and Mexico) stressed the importance of Canadian and Mexican involvement in policy discussions so as to avoid becoming "policy takers" when the United States finalizes its approach.

The role of existing institutions and the potential creation of new institutions trilaterally is an important factor to consider in discussions of changing energy relationships. Many participants agreed that there is a lack of "bandwidth" within national governments to deal effectively with many of these issues. In particular, several Mexican experts noted a lack of capacity, resources and political

experience in dealing with many climate change issues. While North America remains one of the most closely integrated economic regions in the world, the political and policy relationship is much weaker when it comes to addressing clean energy and climate change. The strengthening of existing national and trilateral institutions (as well as the potential creation of new venues) was noted as a first step in moving forward. Various proposals were discussed in the dialogues, including a potential "NAFTA" for the environment, the role of the Commission for Environmental Cooperation, the role of the Clean Energy Dialogue, and the significance of various political statements, such as at the North American Leaders Summit in August 2009.

Many participants flagged the role of regional initiatives as a fundamental consideration in any analysis of the trilateral relationship. A continental system will not be "one size fits all"; and regional initiatives will need to continue to be carefully considered, both in terms of the opportunities for scaling up existing regional policy frameworks, and the areas of potential divergence/conflict if national (or trilateral) policies are enacted. Regional initiatives have often developed out of policy voids or gaps, such as the Western Climate Initiative (WCI) and the Regional Greenhouse Gas Initiative (RGGI). It was noted, particularly in Western Canada, that many of these regional experiences can be drawn upon for "lessons learned" in shaping policy at the federal levels. Discussions of regional initiatives inevitably led to questions about levelling down versus levelling up, jurisdictional issues, the stringency of regulations (in cases where regional legislation pre-empts national or vice-versa), competitiveness, and methods of measurement, reporting and verification.

As market mechanisms remain underutilized at many levels, and there is not yet a robust North American carbon pricing system, the harmonization of standards and technical cooperation can be seen as pragmatic steps forward.

Given the significance of the COP15 in Copenhagen in December 2009, and the upcoming COP16 meeting in Mexico at the end of 2010, discussions also touched on the role of North America's energy relationships and regional initiatives in shaping the international negotiations. Given all three countries' support of the Copenhagen Accord, and the fact that the next Conference of Parties (COP) meeting will be held in North America, there are significant opportunities for collaboration and progress on a number of key issues moving forward. Climate financing, reducing emissions from deforestation and forest degradation (REDD), reducing emissions from agriculture and the elaboration of Nationally Appropriate Mitigation Actions (NAMAs) are areas in which regional dynamics will play a role and where progress is feasible looking forward to COP16 in Cancun.

2.2 Carbon pricing

Influenced by the state of legislation in the United States at the time of each dialogue session, opinions on cap-and-trade (and subsequently cap-and-dividend or other approaches) varied rather

significantly over the year. While many experts at dialogues in early 2009 identified cap-and-trade as the most prevalent and timely point of entry for Canada and Mexico into the U.S. policy discussion, in late 2009 and early 2010 most focused on the potential role for cap-and-dividend proposals or on speculation about the potential contents of a Senate bill.

Nonetheless, cap-and-trade was seen by many as a fundamental long-term goal for North American climate policy. The potential linking of national systems presents opportunities for significant trilateral cooperation. Some participants noted that such coordination will be necessary to avoid potential competitiveness and leakage concerns. In the short term, the largest roadblock to a continental cap-and-trade framework is uncertainty regarding the "rules of the game" in all three countries. According to many of the experts, a lack of information sharing both within and between domestic policy realms is a persistent issue.

For example, many dialogue participants in Mexico and Canada were concerned that neither country will act on creating a regulatory framework until they know what is coming out of the United States, where there is considerable uncertainty on policy direction. There is concern over a lack of leadership at the federal level on this issue in Canada, while Mexico's main concerns revolve around capacity building, funding and reconciling the need for emissions reductions with growth in a major developing country. The administrative burden of a broad cap-and-trade system in any of the three countries is recognized as a challenge. It was also noted that the more complex the system becomes, the more opportunity there would be for malfeasance and gaming to undermine the process. In this way, the implementation of narrower sector-specific cap-and-trade policies was raised as a potential avenue for trilateral cooperation. Given the economic integration of particular industries (such as transportation), there is considerable potential for identified sectors to become "role models" for broader cap-and-trade efforts. Particularly in the context of the Canada-U.S. bilateral relationship, the electricity sector was noted as one such area where significant collaboration is already taking place and could be built upon.

Participants in Mexico and Canada particularly warned of the risks of "green protectionism" in climate policies in the U.S., notable through the border carbon adjustments (BCAs) that are a feature of many U.S. carbon-pricing proposals. Some participants saw this as providing a rationale for deeper collaboration, given that a common set of frameworks across sectors and jurisdictions would arguably be the best way to address such concerns and avoid negative economic and political consequences. Another important concern raised in the context of competitiveness is the measurement and disclosure of emissions data. This is particularly a concern from the Mexican perspective, as many fear a serious competitive disadvantage given the relative size of their capacity and infrastructure. However, cost-effective investment opportunities might arise in Mexico given the potential for lower production costs in many industries.

Participants in all dialogues recognized the problems that can arise if carbon-pricing systems become overly complex. Offsets were recognized as being particularly problematic in this regard; however, some participants felt that offsets can play an important role in bringing all emissions sources into a cap-and-trade system, so long as they are not treated as an open-ended subsidy. The treatment of offsets in U.S. Senate legislation also remains to be seen and was noted by many participants in the final dialogue sessions as an important determining factor for the continental context, particularly how/if the U.S. will include international offsets in domestic legislation.

There was also broad discussion over the course of the dialogues with regard to a carbon tax. While there is some support for the idea of a carbon tax (particularly from the energy supply industry), the political appetite for a carbon tax remains low.

A final point on cap-and-trade raised at the Mexico and Washington dialogues is the potential for a "North American Bubble," whereby the three countries adopt a joint target that they agree to deliver together. It was agreed by most participants that adopting this European Union-type model would be very difficult in the North American context.

2.3 Energy production

Topics of discussion in the various dialogues included short-term reliance on fossil fuels, renewable energy portfolios, energy efficiency standards and the development of a North American "smart grid."

In the short term, fossil fuel energy sources will remain a key piece of the energy equation in North America. A recurring issue discussed throughout the dialogues was the role that Canadian fossil fuels, in particular from the oil sands, will continue to play in U.S. energy supply. Important considerations in this regard include the role of low carbon fuel standards in shaping production, and carbon capture and storage (CCS) development. It was agreed that the price of oil is an important factor, particularly in the United States, where "boom and bust" cycles are causing a shift toward more serious consideration of sustainable options for energy production, supply and consumption.

Renewable energy has considerable potential but there is a need for increased investment throughout North America. For Mexico, roadblocks to clean energy development include the need for considerable capacity building and funding for projects, as well as the role of Pemex and other nationally owned corporations in the energy equation. However, it was noted that growing concerns over a depleting supply of fossil fuels in Mexico may necessitate significant increases in renewable options in the short term.

Some Canadian participants expressed concern that the opportunity for Canada to become a "green energy superpower" is not being harnessed. The extent to which Canada is making progress in investment and innovation in renewable energy is almost entirely due to provincial legislation and policy measures, rather than to federal initiatives.

Broad discussions of energy integration also brought about consideration of transmission and distribution standards, particularly in light of a North American "smart grid." Interconnectivity depends on much more than policy, given geographical constraints of the physical transmission process. Furthermore, many experts in Canada and the United States agreed that it is difficult to integrate systems if the long-term policy goals of each actor are unknown. In this way, it was agreed that pragmatic, even piecemeal, efforts must be built upon. In the bilateral context, potential avenues for such cooperation (particularly in the absence of a broader regulatory framework) include: Renewable Portfolio Standards (RPS), energy efficiency standards, green building codes, feed-in tariffs and cooperative community energy systems in border regions. However, the definition of "renewables" remains an issue, particularly given divergent opinions on large-scale hydro in the United States and Canada.

In all three countries, innovation and financing were recognized as fundamental in moving towards a low-carbon future. In Canada, some participants raised concerns that investments made by the U.S. government's stimulus package and other legislation have made the United States more attractive than Canada or Mexico for renewable energy investment. There is a great deal of potential (and some existing) collaboration on trilateral demonstration projects and research and development. Experts (particularly in Western Canada) noted that a technology focus targets mainly the producer, while there is also a need to engage consumers. Combining pricing, peaksaver programs and other incentive mechanisms can contribute to a paradigm shift in energy production and consumption patterns.

2.4 Carbon capture and storage

Most experts regard CCS as one tool in the mix of options, though it is not the panacea or "silver bullet." There are certain aspects of coal and oil production that lend themselves to CCS, while others do not. In this way, CCS is viewed as part of a larger carbon management strategy within North American. Like many of the other topics discussed, participants stressed the need for an approach that sees enduring policy and provides a degree of certainty and consistent "rules of the game." CCS has been one area where cross-border coordination has progressed, and is likely to continue given the interests of both the United States and Canada in such activities. Mexico's involvement in CCS has been very limited, and the costs and benefits of CCS need to be more closely examined in Mexico. Cooperation in pilot projects was identified as a way to help establish a

regulatory template in anticipation of larger-scale projects in all three countries.

Furthermore, the potential impact of a cap-and-trade system needs to be carefully considered in devising a policy roadmap for the future, as the price of carbon will impact the attractiveness of CCS activities and investment. Investments in alternative, renewable and/or low-carbon technologies will also significantly impact the need and demand for CCS technologies in the future.

2.5 Transportation

As the final key policy theme discussed in the expert dialogues, transportation is recognized as a sector in which opportunities for coordination are particularly feasible in the short to medium term.

Addressing the use of high-emitting transportation fuels will be essential to meeting greenhouse gas mitigation goals in Canada and the United States. The development of low carbon fuel standards in order to reduce the carbon intensity of transportation fuels has made some encouraging progress over the past year in the United States and Canada. According to some participants, the necessary investment needed to meet new vehicle standards is taking place in the United States, while that is not the case in either Canada or Mexico.

Transportation represents a large proportion of energy consumption in all three countries, particularly in the context of freight, which represents almost half of Canada's emissions from transportation. The use of inefficient and older-model vehicles was cited as an ongoing issue in all three countries, particularly in Mexico. Poorly maintained "chocolate" (black market) cars and cargo trucks are (often illegally) brought over from the United States, significantly contributing to emissions levels in the transportation sector in Mexico. A number of provinces and states across North America have created incentive programs such as tax rebates or vouchers towards the purchase of newer, more efficient vehicles. Such policies can decrease the number of higher-emitting vehicles on roads in North America, particularly if coupled with more stringent emissions standards.

Transportation demonstrates the need for policy cooperation at all levels of government, given the municipal, regional, state/provincial and national jurisdictional roles in policy-making and implementation. Factors related to transportation were also raised in a number of the dialogues, including urban planning models and geographical differences through North America.

3.0 Conclusion

The expert dialogues have proven a valuable method for "testing the waters," gathering knowledge and taking stock of many important issues related to trilateral cooperation on climate change and clean energy. Policy developments over the past year, particularly in relation to the development of U.S. legislation, have provided a dynamic basis upon which to compare input from the diverse groups of participants across North America.

The potential for cooperation, harmonization and/or streamlining of policies and programs will remain a main driver for our future work. Further research and analysis is needed to increase the policy breadth and depth on many of the issues discussed above, with the priorities as identified by participants being linked to cap-and-trade systems and addressing high-carbon fossil fuels in the transportation and electricity sectors. Participants broadly recognized that a "wait and see" policy stance will not result in the needed emissions reductions and low-carbon development. Reaching emission-reduction and sustainable development goals throughout North America will require a broad and complex mix of policy tools and mechanisms. Dialogue participants concluded that what is needed in the short term is a pragmatic approach, one that recognizes the comparative advantages of each country, builds upon past progress and existing architectures, and furthers a long-term vision of cooperation throughout North America on clean energy and climate action.