

Viewpoints and Perspectives

Climate Change Regionalism in North America

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Introduction

Global institutions and debates about climate change governance attract considerable academic and media attention. The main multilateral forums are arenas for high-profile political negotiations, inter-state conflicts, and thousands of nongovernmental actors. Similarly, national climate change politics and policy are significant to decision makers and scholars, and local and urban climate change activism and planning also draw notable interest. However, outside the European Union (EU), much less analytical and political attention is paid to issues and possibilities of regional-level climate change governance—despite the fact that regional cooperation and institutional arrangements offer a multitude of political, economic, and environmental benefits not readily available in local, national, or global settings (Balsiger & VanDeveer, 2010; Jordan, Huitema, Van Asselt, Rayner, & Berkhout, 2010; Patt, 2009). Furthermore, regional policy making around economic integration and trade has proliferated in recent decades, resulting in scholarly and political debates about the complementarities and conflicts between global and regional trade initiatives, state sovereignty, and democratic governance (Kuhnhardt, 2010; Laursen, 2003).

Even as North American trade and economic integration deepened significantly over the last 20 years, little public debate about regional options for better climate change and energy governance has followed. In fact, few leading North American national politicians—some in Canada and Mexico but practically none in the United States—have paid serious attention to continental alternatives for reducing greenhouse gas (GHG) emissions and addressing adaptation needs, even as the dynamic nature of multilevel climate change governance driven by subnational policy leadership across the continent is growing (Selin & VanDeveer, 2009a, 2009b). However, it is possible to identify potential benefits for North American countries of more coordinated action across Canadian, U.S., and Mexican public and private sector entities. Furthermore, global GHG emissions cannot be adequately reduced—and the goal of keeping average global temperatures from increasing more than 2°C over preindustrial levels cannot be met—without significant cuts in North American emissions.

This viewpoint article intends to stimulate both scholars and practitioners to engage in more serious reflection and critical debate about opportunities for further coordinated North American responses to climate change. It draws atten-

tion to expected intellectual, economic, political, and environmental advantages of expanded continental climate change and energy governance for all three North American societies. First, we briefly address the notion of climate change regionalism and highlight ways to think about multilevel governance arrangements already developing in North America. This is followed by a discussion of four broad areas of potential benefits of expanded continental climate change policy making: gaining from policy learning, capturing economic efficiency gains, meeting adaptation challenges, and exercising global leadership. The article ends with some remarks on the future of North American climate change governance, calling for more regionally focused empirical research and analysis.

Climate Change Regionalism

It is generally recognized that EU organizations, European states, civil society organizations, and private sector actors have developed the world's most comprehensive set of regional institutions and policies to address challenges posed by climate change (Jordan et al., 2010; Selin & VanDeveer, 2010). The EU experience offers valuable lessons for other regions—including both successes and failures in policy design and implementation—as well as demonstrates general benefits of regional cooperation and policy making. Yet, the EU consists of a unique set of institutions emergent from particular historical, political, social, cultural, and economic contexts. Contemporary European governance is the result of over five decades of institutional development. Because this is not the case in North America, the idea that other regions may learn from the EU experience of regional climate change governance does not suggest the states outside Europe can, or even should, simply copy the EU.

Regionalism is a contested concept that engenders different definitions across scholarly disciplines and theorists. Nevertheless, the notion of a region often refers to contiguous political jurisdictions. These connected jurisdictions offer politically and environmentally salient geographic spaces around which environmental problems and institutions may be framed. Recently, analysts have distinguished between three types of regional governance, including those organized mostly on the basis of interstate governance, those based on an “ecoregion” that may not correspond well to political boundaries, and those seeking to construct regionally framed sustainable development (Balsiger & VanDeveer, 2010). This article about North American climate change regionalism generally focuses on the prospects for greater interstate governance, but it does so in the context of three states with dynamic forms of environmental federalism sharing ecological space and resources on a common continent (Selin & VanDeveer, 2009a, forthcoming).

North American climate change regionalism refers to a dynamic, political, multilevel context in which local, state, provincial, and federal actors formulate economic, environmental, and energy policies within their own jurisdictions. Furthermore, the exact number and definition of the particular levels of jurisdiction is neither always clear, nor static. As such, “local” politics might include small towns, counties, large cities, or multi-jurisdictional metropolitan areas. Similarly, states and provinces make policy individually, but they also work in groups both within and across national boundaries. For example, the six New England states

collaborate with each other, with states outside New England, and with Canadian provinces around sets of climate and energy policies. Similarly, California is a leader in climate change and energy policy development by itself, but it also works with other U.S. states, Canadian provinces, and Mexican states. Thus, “regional” is a multi-scalar concept that may refer to continental geographic spaces, such as Europe or North America, as well as to smaller spaces or subregions.

Understanding multilevel regional governance requires appreciating the multi-directional nature of politics and policy-making authority and shifting boundaries between states and societies (Piattoni, 2010). In Europe, the concept of “subsidiarity” refers to debates over the most appropriate level at which to vest governing authority for particular policy problems or tasks. In North America, similar federalist debates take place both within and among each of the three large states on the continent. Ideally, “cooperative federalism” involves actors at different governance levels supporting each other toward the fulfillment of shared goals—different federal levels acting in a complementary manner. However, Derthick (2010) argues that U.S. climate change politics is better understood as “compensatory federalism.” Rather than subnational jurisdictions taking actions in conjunction with federal laws and goals, subnational entities are compensating for a lack of meaningful federal action. Much the same might be said of climate change politics in Canada and Mexico (Gore, 2010; Stoett, 2009).

Early stages of North American climate change politics can be characterized as “bottom-up expansion” (Selin & VanDeveer, 2009a). As a growing number of federal and subnational actors become active, the bottom-up dynamics begin to look more like “complex multilevel coordination.” Then, federal authorities establish minimum standards with which a wide range of public and private subnational actors must comply—as seen in recent increases in energy efficiency standards for vehicles and some electronic equipment as well as in debates over renewable energy mandates. Simultaneously, subnational authorities may be allowed (or even encouraged) to exceed at least some federal standards, as federal action establishes policy “floors.” This leaves room for more ambitious policy action at the supranational level as well as for collaborative initiatives by groups of states and provinces or transnational networks of cities and private actors. Still, the diversity of policy preferences and interests ranging from the local to the regional makes multilevel climate change governance more than a little challenging.

North American Climate Change Action: Four Sets of Benefits

Based on a minimal definition of multilevel governance of policy actors and stakeholders operating across horizontal and vertical levels of social organization and jurisdictional authority, such governance is emerging in North America around climate change. Importantly, Canadian, U.S., and Mexican federal political systems do not divide climate change-related decision-making authority in identical ways, and many issues of authority remain unsettled as federal, state/provincial, and municipal officials and organizations struggle over policy-making rights and responsibilities. Nevertheless, enhanced North American cooperation offers opportunities to reap shared short- and longer-term benefits. Taking into account the history and current state of North American regionalism, including in the area of

climate change, there are at least four sets of potential benefits of increased continental collaboration: gaining from policy learning, capturing economic efficiency gains, meeting adaptation challenges, and exercising global leadership (Selin & VanDeveer, 2009b).

Gaining from Policy Learning

A common argument in federalism and multilevel governance literatures is that policy experimentation across multiple jurisdictions with a diversity of policy instruments and goals yields success in the search for appropriate and cost-efficient measures to address particular economic, social, and environmental issues (Rabe, 2009, 2010; Selin & VanDeveer, forthcoming). Important lessons can be drawn from Massachusetts's declining GHG emissions, California's suite of climate change and energy policies, British Columbia's carbon tax scheme, and hundreds of other policy experiments across the continent. Expanded North American multilevel cooperation provides avenues of policy diffusion and learning. The North American federal systems offer numerous opportunities for policy learning from which jurisdictions across the continent can benefit. North American policy leaders in the public, private, and civil society sectors also already work to disseminate their policy initiatives and lessons to other jurisdictions and across national boundaries (Gore 2010; Selin & VanDeveer, 2007, 2009a).

For example, under The Climate Registry, over 60 member states, provinces, and tribes from all three North American countries collaborate, serving as a basis for continental standardization of GHG estimation and reporting. Through the Western Climate Initiative (WCI), a set of U.S. and Mexican states and Canadian provinces cooperate to address climate change and implement a joint strategy to reduce GHG emissions. Six U.S. states and five Canadian Provinces formulated a joint action plan under the Conference of New England Governors and Eastern Canadian Premiers, and are developing intra-jurisdictional policies and programs toward meeting shared policy goals and GHG reduction targets. The same New England states and four others launched the Regional Greenhouse Gas Initiative (RGGI), a GHG cap-and-trade scheme, in late 2008, following a period of collaboration and rule making dating back to 2003. By late 2010, officials from RGGI states were sharing expertise and information and working with officials and activists in WCI states and provinces (among others), seeking ways to collaborate on rules, standards, and programs across jurisdictions and with federal authorities.

State- and provincial-level renewable portfolio standards currently contain a plethora of differing mandates and definitions (Carley, 2011). Some of these experiments in renewable energy generation and carbon governance are more effective, easier to implement, and/or more efficient than others. State and provincial officials are also engaged in policy diffusion and lesson learning, seeking to improve individual and collective standards and mandates. There are also practical reasons for lesson drawing and harmonization across subnational jurisdictions, as regulatory diversity and contradictions in basic definitions of what constitutes "renewable" energy or an "energy efficient" product may obstruct or distort trade (Rowlands, 2009). States and provinces currently have very different levels of renewable energy in their grids and substantially different legal and regulatory institutions related to

environmental protection and energy production and consumption. Greater continental cooperation for climate change and energy policies offers enumerable learning opportunities from these diverse contexts and policy experiments, while reaping benefits of at least some policy harmonization.

Alongside the many institutionalized cross-border forums for North American policy diffusion and lesson learning, a growing number of policy leaders use organizations and professional and personal networks to move information about climate change policies and management actions across public, private, and civil society sectors. Many policy advocates in public, private, and civil society sectors rely on such connections for information and advice. This may lead to changes in professional norms and interests, as meetings and training programs in professions such as transport and land-use planning, wastewater treatment, and public accounting incorporate climate change mitigation and adaptation into their normal activities. Of course, various levels of governance authority may encounter limits in their ability to lead and influence others—a point demonstrated by Gore's (2010) analysis of Canadian municipal networks. North America is a long way from standardized governance, but policy diffusion and learning may build increased normative agreement around the need to reduce GHG emissions over time and adapt to a changing environment (Selin & VanDeveer, 2007).

Capturing Economic Efficiency Gains

The 1994 North American Free Trade Agreement (NAFTA) created a single trilateral marketplace. It is one of the world's largest regional trading blocs and has governed continental trade for almost 20 years. By 2008, all NAFTA duties and quantitative restrictions had been eliminated. NAFTA covers electricity, as well as the trade in tens of thousands of goods and services which create and use energy. The NAFTA market includes more than 440 million people producing \$17 trillion in goods and services every year. These economic activities also generate over 8.3 billion tons of GHG emissions, constituting over 20 percent of global emissions. Yet, there remains markedly little trilateral cooperation and debate among Canada, the United States, and Mexico around important climate change issues. Recognizing the importance of NAFTA when planning and implementing GHG policies, continental climate change cooperation affords opportunities to increase economic efficiencies and reduce the costs of green technology expansion, clean energy development, and the introduction of liquid carbon markets in all three countries.

With respect to the introduction of green technologies, economies of scale dynamics dictate that average cost per unit falls as the size of the market and competition increase. The development of shared standards for less carbon intensive goods commonly traded under NAFTA would facilitate growth in continental markets for more energy and fuel-efficient products such as automobiles and other vehicles, home appliances, office equipment, and heating and air conditioning units. Raising such standards may have the benefit of using the size of the NAFTA market to push North American manufacturers to develop new products that can be sold also in foreign markets, as well as drive foreign firms to make more efficient products for the NAFTA market. As European standard setters know, there is global power in high standards because the costs for foreign producers to comply are

generally much lower than giving up a large market like the EU or NAFTA (Selin & VanDeveer, 2006). Continental minimum standards also help prevent a “race to the bottom.” A North American standard means that a firm cannot decide to relocate from one NAFTA jurisdiction to another to avoid compliance with GHG controls.

Because of semi-integrated energy markets and shared climatological and economic conditions, provinces and states around the Canadian and U.S. border and states on both sides of the U.S. and Mexican border share common energy futures. Greater harmonization of standards would facilitate renewable energy trade along both borders. This would enhance opportunities for things like Mexican exports of wind and solar power to the United States and Canadian exports of hydropower to the United States. Better integrating energy production and distribution grids entails many years of investment and construction. Without transnational collaboration, such development may not accommodate the needs to transport renewable energy from where it can best be produced to where it is most needed. As it stands now, state and provincial renewable portfolio standards contain a plethora of differing mandates and definitions which can obstruct cross-border trade, risking legal disputes (Rowlands, 2009). Switching away from dirty fossil fuels and ineffective technologies also helps target additional air pollutants—including mercury, sulfur dioxide, nitrogen oxide, ground-level ozone, and particulate matter—through co-benefits of more stringent emission controls (Mickley, 2007; Selin, 2009; Wang et al., 2009).

North American carbon markets are currently in their infancy. However, North America’s 8.3 billion metric tons of annual carbon equivalent emissions suggest that with serious GHG controls, the value of a continental carbon market could quickly grow to several hundred billion dollars (even if only a portion of total emissions are covered). If carbon markets grow, it seems likely that bottom-up and complex multilevel dynamics will be at play. Regional and state markets in the United States Northeast and the United States and Canadian West are either operating or in development. There are clear benefits of linking these still disparate systems to induce common standards. Rather than building separate national and/or more subnational carbon markets, creating a continental market would capture efficiency opportunities and lower transaction costs. Such a market could potentially take advantage of existing institutions for continental economic integration. In the shorter term, there are opportunities for greater cooperation among jurisdictions willing to take the lead in developing carbon markets. As energy flows across borders, often by publicly traded companies with shareholders from multiple countries, it makes economic and political sense to expand carbon markets to drive investments and bring down North American GHG emissions.

Meeting Adaptation Challenges

GHG mitigation is only one side of the climate change issue (and admittedly a huge one). Another one concerns adaptation. The sooner public authorities and other stakeholders in the United States, Canada, and Mexico begin addressing regional adaptation issues together, the better citizens can prepare for challenges associated with ongoing and possible climatic changes. Expanded continent-wide climate

governance can help North American societies to prepare for shared and cross-border adaptation issues, such as those related to ecosystem health, extreme weather events, freshwater distribution and availability, coastal erosion, forestry and agricultural changes, and fisheries management (Karl, Melillo, Peterson, Hassol, 2009; Lemmen, Warren, Lacroix, Bush, 2008). Policy makers and researchers in all three countries have barely begun to conduct regional and local assessments and design contingency plans. Federal and subnational policy makers could use common forums to support the diffusion and implementation of effective adaptation policies at state, provincial, and municipal levels, and to ensure that these are coordinated across borders, as appropriate.

Climate change adaptation is a human security issue (Dodds, Hingham, & Sherman, 2009). Many stakeholder categories of people across North America may be severely impacted by climate change, including indigenous peoples, farmers, and low-income households in both urban and rural areas. Furthermore, climate change may be viewed as an issue that also impacts more traditional national security concerns (Moran, 2011; Paskal, 2010). A growing number of North American intelligence and military analysts argue that consequences of drought, immigration, and the opening of Arctic sea lanes and new opportunities for off-shore natural resource exploitation, creates additional long-term security challenges for states. It is also likely that there will be intense competition involving North American as well as other countries for access to natural resources in the Arctic region, even if military conflict around these issues seems unlikely at present (Arctic Climate Impact Assessment, 2004; Borgerson, 2008). These and other kinds of national security-related adaptation issues demand more regional attention.

Exercising Global Leadership

Greater North American climate change cooperation and institution building can help the region's societies meet political and economic challenges posed by the EU, China, India, and other countries. To date, the United States is famous for inhibiting global climate change cooperation, while Canada is known for failing to implement promises made in global forums, and Mexico remains in a mostly reactive position vis-à-vis the United States. Working to unite North American mitigation and adaptation efforts—with associated learning potential and efficiency gains—offers increased opportunities to more proactively shape regional and global climate change and energy policy (VanDeveer & Selin, 2010). Of course, climate change cooperation within North America and between North America and the rest of the world will not be seamless. Federal and subnational governments and stakeholders differ substantially in their views about the most appropriate ways to address climate change (if at all). However, expanded multilevel continental governance can aid important transitions in all three North American countries. More than political statements in global and national forums, this would demonstrate that North American countries can and will curb their GHG emissions.

There may also be opportunities to use cooperation between Canada, the United States, and Mexico as a means to better engage other countries in the Americas and elsewhere. Drawing on European lessons of regional cooperation and benefits of pushing internal regulations and standards in external forums and global markets,

greater North American climate change collaboration could serve as a model for expanding the list of countries engaged in GHG reductions and adaptation measures. If NAFTA states can agree on common institutions and technical standards for a carbon market, Latin American and other states engaged in free trade with the NAFTA region might be invited to negotiate entry into this market (as the NAFTA agreement serves as a basis for free trade negotiations with the United States and others in the Western Hemisphere). Or, if NAFTA states agree to implement a common set of energy efficiency standards for products, these regulations will likely drive some change in product manufacturing in a host of countries in Latin America, Europe, and Asia, all exporting to the NAFTA market. Thus, greater North American collaboration offers opportunities for global economic and political influence and leadership.

Where to Go from Here?

In all three North American states, federal policies continue to fall well short of those needed to substantially reduce GHG emissions or to adapt to a changing climate. In fact, Canadian, U.S., and Mexican national GHG emissions continue to increase. However, a growing number of climate change and renewable energy leaders on the continent and many subnational actors are pushing innovative and (sometimes) effective policy developments. In support of these policies they are building new and larger institutions and transnational networks despite their federal governments' inaction. Yet, important questions remain regarding the future development and implementation of more aggressive North American climate change policy at all levels of governance. For example, how long can subnational leaders continue to expand policy and strengthen standards without a more inclusive approach involving all subnational jurisdictions and federal governments? Will federal authorities continue to tolerate subnational leadership and related proliferation of standards, or will they seek pre-emption? Many more questions, big and small, beg for answers based on detailed empirical research and careful analysis.

This brief viewpoint article merely scratches the surface of North American complex multilevel governance in the area of climate change mitigation and adaptation. It highlights some possible benefits of expanded continental collaboration and institution building, rather than pronounce definitive judgments or predictions on these issues. Clearly, further in-depth study of general and specific benefits, costs, and risks of regional action is needed. Insights from the EU literature—about climate change, energy and environmental issues specifically, and about multilevel governance more generally—are likely to be helpful in such assessments, even if much EU climate change policy making has grown more top-down over time, while North America's remains more bottom-up. Nevertheless, European politics and policy demonstrate that the regional level can play a central role in addressing issues of shared concern and importance such as climate change. In the European context, regional can also refer to the EU as a whole, as well as to smaller geographic spaces such as seas, mountain ecosystems, river basins, and other subsets of national jurisdictions.

The EU makes policies for all 27 member states, but it also facilitates cooperation around, for example, the Baltic Sea and the Alps (Balsiger & VanDeveer, 2010). In North America, climate change cooperation has the potential to build on pioneering efforts such as the Great Lakes and Rio Grande institutions, accruing substantial economic, social, and ecological benefits in the process. Regional cooperation might include greater use of existing institutions, such as NAFTA's Commission on Environmental Cooperation (Craik, 2010). Other options involve the use of shared institutions such as the WCI to manage carbon trading among states and provinces, or the Carbon Registry for greater common standards and procedures for emissions reporting. Much public policy and public administration research focuses on states, subnational levels of government, and/or the interactions of domestic levels of authority. The challenges posed by climate change policy making—for mitigation and adaptation—call for more attention to regional multilevel governance in research design and theorizing. Climate change demonstrates all too well that there is much yet to learn, and much left to do.

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