Cross-Border Constraints on Climate Change Agreements: Legal Risks in the California-Quebec Cap-and-Trade Linkage

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Summary

As the world begins implementing the Paris Agreement, Canada and the United States remain without comprehensive greenhouse gas regimes at the federal level; most action has taken place at the subnational level. At the forefront is the California-Quebec cap-and-trade market linkage. Close examination of this example demonstrates that such linkages are susceptible to constitutional constraints on both sides of the border. This Article presents constitutional dimensions from Canada and the United States, and shows there is a live risk that a court could find the linkage constitutionally offside due to its binding effect. Constitutional constraints particular to the United States also suggest that foreseeable changes may put the California state program at variance with federal climate policy, rekindling risks around consistency between state action and U.S. foreign policy. The Article puts forward two suggestions, one federal and one subnational, that could be taken in Canada and the United States to partially reduce the remaining legal risk.

Canada and the United States share a long history of managing air pollution together.[1] Today, attention is largely focused on reduction of greenhouse gas (GHG) emissions. Most of the action is at the subnational level, as seen in the linking of cap-and-trade regimes between California and Quebec discussed in this Article. With no comprehensive legal framework for GHG emission reductions at the federal level in both Canada and the United States, this subnational trend is likely to continue.[2] In fact, the provinces of Ontario and Manitoba confirmed in late 2015 that they are taking steps to implement cap-and-trade regimes, with the stated intention of linking with California and Quebec.[3]

Much attention to date has focused on the economic dimensions of the issue and the rationale for linking subnational markets.[4] Less attention has been paid to the *legal* risks involved by such cross-border agreements. Legal risks primarily take the form of constitutional barriers to cross-border linking of subnational carbon markets. These issues have received some attention in the literature,[5] primarily

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1. Formalized cooperation dates back to the Convention Between the United States and Great Britain for the Protection of Migratory Birds, Aug. 16, 1916, 39 U.S. Stat. 1702, T.I.A.S. No. 628. This convention is widely recognized as the first international conservation agreement in the western hemisphere.
2. Note that most consider subnational efforts to be a second-best option, believing a comprehensive federal regime, either cap and trade or carbon tax, to be preferable. *See, e.g.*, Cary Coglianese & Jocelyn D'Ambrosio, *Policymaking Under Pressure: The Perils of Incremental Responses to Climate Change*, 40 Conn. L. Rev. 1411, 1429 (2008). *See also* Valentina Bosetti & David G. *Victor, Politics and Economics of Second-Best Regulation of Greenhouse Gases: The Importance of Regulatory Credibility*, 32 Energy J. 1, 19 (2011); Mathew Ranson & Robert Stavins, *Linkage of Greenhouse Gas Emissions Trading Systems: Learning From Experience* (Harvard Project on Climate Agreements, 2013); Ann Carlson, *Designing Effective Climate Policy: Cap-and-Trade and Complementary Policies*, 49 Harv J. Legis. 207 (2012).
3. Canadian Press, *Manitoba, Ontario, Quebec Sign Accord to Link Cap-and-Trade Systems*, Globe & Mail, Dec. 07, 2015, *available at* http://www.theglobeandmail.com/news/national/manitoba-ontario-quebec-link-cap-and-trade-systems/article27629453/. During the 2015 international climate change negotiations in Paris, provinces signed a memorandum of understanding (MOU) on this. *See* Memorandum of Understanding Between the Government of Ontario, the Government of Québec and the Government of Manitoba Concerning Concerted Climate Change Actions and Market-Based Mechanisms (2015), https://news.ontario.ca/opo/en/2015/12/memorandum-of-understanding-between-the-government-of-ontario-the-government-of-quebec-and-the-gover.html.
4. *See, e.g.*, Mark Purdon et al., Sustainable Prosperity, The Political Economy of California and Québec's Cap-and-Trade Systems (2014), *available at* http://www.sustainableprosperity.ca/sites/default/files/publications/files/QuebecCalifornia%20FINAL.pdf. *See also* Mathew Bramley et al., International Inst. for Sustainable Dev., Linking National Cap-and-Trade Systems in North America (2009), *available at* https://www.iisd.org/pdf/2009/linking_nat_cap_north_america.pdf.
5. Douglas Kysar & Bernadette Meyler, *Like a Nation State*, 55 UCLA L. Rev. 1621 (2008); Jeremy Lawrence, *The Western Climate Initiative: Cross-Border*

in the period between the passing of California's Global Warming Solutions Act of 2006[6] and the 2009 international climate change negotiations in Copenhagen. However, there has been less commentary in recent years despite several significant changes in a climate change context.

Evolution from hypothetical to actual cross-border linkage is the most obvious change. On January 1, 2014, California and Quebec officially linked cap-and-trade markets, holding six joint auctions as of February 2016.[7] This linkage is part of a broader change unfolding in political, legal, and scientific realms. For example, movement toward more carbon pricing in Canada has gained momentum as a result of recent election results in Alberta, Ontario, and at the federal level.[8] Meanwhile, on the American side, the U.S. Environmental Protection Agency (EPA) has released the final Clean Power Plan (CPP)[9] requiring all states to take action to reduce emissions from the United States' largest source of emissions—the electricity sector.[10] At the international level, parties to the United Nations Framework Convention on Climate Change (UNFCCC) have adopted the Paris Agreement,[11] marking a fundamental shift toward a bottom-up approach to global climate change governance that includes emissions reduction targets for both developed and developing countries.[12] Finally, but perhaps most significantly, climate change impacts have become increasingly palpable.[13]

Such changes warrant a fresh look at legal constraints on state/province carbon market linkages. The time is also ripe to consider ways that current and emerging regimes can minimize risks of legal challenge on constitutional bases. Part I of this Article provides a snapshot of the climate change mitigation regime with an emphasis on subnational carbon markets in Canada and the United States, and the linkage between Quebec and California in particular. Part II presents a detailed view of the anatomy of the Quebec-California linkage. This sets up a revisiting of constitutional constraints in Canada and the United States in Part III, with specific reference to the now-operational cross-border market linkage. Part IV builds on the analysis by exploring two options available to manage constitutional constraints, one at the federal level and one subnational.

It should be stated at the outset that this Article does not put forward a normative argument for proliferation of subnational carbon markets. A legitimate debate is ongoing about the merits of such incrementalism versus waiting for a comprehensive national or continental carbon market.[14] Rather, the Article takes as its starting point the fact that these subnational linkages exist, that they are exposed to constitutional constraints, and that further clarity is desirable in this evolving context, including with respect to reconciling tension between linkages and constraints.

The analysis is broadly relevant given the international climate regime's direction toward the bottom-up approach, the implementation of which is likely to include many subnational jurisdictions cooperating across borders. While the California-Quebec arrangement is the first (and so far only) subnational cross-border carbon market linkage in North America, the trend is likely to increase on this continent and beyond.

Collaboration and Constitutional Structure in the United States and Canada, 82 S. Cal. L. Rev. 1225 (2008); Michael Barnett, *Canadian Provinces and the Western Climate Initiative: The Constitutionality of Extraordinary Cross-Border Cooperation*, 48 Colum. J. Transnat'l L. 321 (2009); Shelley Welton, *State Dynamism, Federal Constraints: Possible Constitutional Hurdles to Cross-Border Cap-and-Trade*, 27 Nat. Resources & Env't 36 (2012); Hannah Chang, *Foreign Affairs Federalism: The Legality of California's Link With the European Union Emissions Trading Scheme*, 37 ELR 10771 (Oct. 2007).

6. Global Warming Solutions Act, Cal. Health & Safety Code §§38501-38599 (2006), Assembly Bill 32 [hereinafter AB 32].
7. California Air Resources Board (CARB), *Auction Notice, California Cap-and-Trade Program and Québec Cap-and-Trade System Joint Auction of Greenhouse Gas Allowances on February 17, 2016* (2015), *available at* http://www.arb.ca.gov/cc/capandtrade/auction/feb-2016/notice.pdf.
8. *See* Jason Kroft et al., *Canadian Carbon Politics Redux: Climate Change Following a Liberal Majority Win*, Stikeman Elliott LLP blog, Nov. 26, 2015. A leading climate economist in Canada recently remarked, "November 2015 has likely been the busiest month for Canadian climate policy makers, ever." Nicolas Rivers, *Just What Is Canada Bringing to the Table at the Paris Climate Summit?*, Policy Options (Nov. 2015), http://policyoptions.irpp.org/2015/11/24/just-what-is-canada-bringing-to-the-table-at-the-paris-climate-summit. In fact, on February 24, 2016, Ontario released the Climate Change Mitigation and Low-Carbon Economy Act, 2016, which is the province's proposed cap-and-trade legislation. *See* Bill 142, 41st Leg. (First Reading, Feb.24, 2016).
9. U.S. Envt'l Prot. Agency (EPA), Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units; Final Rule, 80 Fed. Reg. 64661-65120 (Oct. 23, 2015), https://www.gpo.gov/fdsys/pkg/FR-2015-10-23/pdf/2015-22842.pdf [hereinafter Clean Power Plan (CPP)].
10. *See* U.S. EPA, *Fact Sheet: Clean Power Plan by the Numbers* (2015), http://www.epa.gov/cleanpowerplan/fact-sheet-clean-power-plan-numbers#print.
11. The Paris Agreement was initially simply an Annex to the U.N. Framework Convention on Climate Change (UNFCCC) Conference of the Parties (COP) decision to adopt it; however, it became a separate formal agreement when it opened for signature on Apr. 22, 2015. *See* U.N. Doc. FCCC/CP/2015/L.9/Rev.1. *See also* UNFCCC, *Adoption of the Paris Agreement: Proposal by the President* (Dec 2015), http://unfccc.int/documentation/documents/advanced_search/items/6911.php?priref=600008831.ParisAgreement [hereinafter Paris Agreement].
12. For discussion of the bottom-up approach and its relation to linking different jurisdictions, see Daniel Bodanksy et al., *Facilitating Linkage of Heterogeneous Regional, National, and Sub-National Climate Policies Through a Future International Agreement* (Harvard Project on Climate Agreements, 2014), *available at* http://belfercenter.ksg.harvard.edu/files/ieta-hpca-es-sept2014.pdf.
13. *See generally* Intergovernmental Panel on Climate Change (IPCC), Summary for Policy Makers: Climate Change Impacts 2014: Impacts, Adaptation, and Vulnerability (C.B. Field et al. eds., 2014), *available at* http://www.ipcc.ch/pdf/assessment-report/ar5/wg2/ar5_wgII_spm_en.pdf (providing a detailed view of impacts across the globe). *See also* U.S. Global Change Research Program, Climate Change Impacts in the United States: The Third National Climate Assessment (Jerry Melillo et al. eds., 2014), http://nca2014.globalchange.gov (providing a detailed view of impacts in the United States).
14. *See, e.g.*, Coglianese & D'Ambrosio, *supra* note 2.

I. State of the Climate Regimes: Progress Abroad, Concrete Steps in North America

A. *International*

Since the failure of UNFCCC negotiations to produce a comprehensive legal agreement in Copenhagen in 2009,[15] significant changes have been unfolding at the international, national, and subnational levels. In the international realm, there has been a fundamental shift in approaches toward a global agreement.[16] This has produced the recent Paris Agreement, which is structured on the basis of a bottom-up approach.[17] Under this structure, each country determines its contribution to a cooperative effort to reduce GHG emissions based on policies it intends to implement.[18] In today's climate-speak, the policies are called intended nationally determined contributions (INDCs).[19] The bottom-up approach is a change from previous top-down efforts that were largely unsuccessful, the Kyoto Protocol being the clearest example.

Going into the December 2015 Conference of the Parties (COP) 21 in Paris, 185 countries, accounting for approximately 94% of global emissions and 97% of global population, had submitted INDCs,[20] including Canada and the United States. With their respective submissions,[21] the countries followed a longstanding pattern of setting out similar emission reduction amounts.[22] Canada's INDC presents an intention to "achieve an economy-wide target to reduce . . . greenhouse gas emissions by 30% below 2005 levels by 2030."[23] In its INDC, the United States indicates that it, "intends to achieve an economy-wide target of reducing its greenhouse gas emissions by 26-28 per cent below its 2005 level in 2025 and to make best efforts to reduce its emissions by 28%."[24] Both countries' INDCs included summaries of the policies and measures each planned to put in place to reach the emission reduction targets. For example, both Canada and the United States referenced regulations of power plants and methane emissions.[25]

In developing INDCs, Canada and the United States shared a common challenge: Neither federal government had a comprehensive GHG emission reduction regime in place. Though there had been significant efforts to do so in both countries, none were successful. For example, the American Clean Energy and Security Act of 2009 (Waxman-Markey Bill)[26] would have introduced a national cap-and-trade regime, but it was not supported by the U.S. Senate. In Canada, the 2007 Turning the Corner[27] climate change action plan would have introduced a comprehensive suite of federal measures, but was eventually dropped for the more recent sector-by-sector regulatory approach.[28]

In the absence of a comprehensive federal regime, much action has been taking place at the subnational level. This work will be of fundamental importance to either country meeting its INDC emission reduction objectives.[29] Some

15. The 2009 Copenhagen COP 21 produced the Copenhagen Accord, which was widely regarded as a failure at the time due to its being a political rather than legal agreement that did not enjoy the full support of all UNFCCC parties. *See* UNFCCC, Report of the Conference of the Parties on Its Fifteenth Session, Held in Copenhagen From 7 to 19 December 2009, FCCC/CP/2009/11/Add.1, Decision 2/CP.15 (2010).
16. *See* Daniel Bodansky & Lavanya Rajamani, *Evolution and Governance Architecture of the Climate Change Regime, in* International Relations and Global Climate Change: New Perspectives (Detlef Sprinz & Urs Luterbacher eds., 2d ed., forthcoming 2016).
17. *See* Doug Gavel, *Professor Robert Stavins on the Paris Agreement*, Harvard Kennedy School at COP 21 Blog (Dec. 13, 2105), http://www.hks.harvard.edu/news-events/news/articles/stavins-cop21-blog-paris-agreement. For more detailed commentary on the bottom-up approach, see *id.*
18. *See* Meinhard Doelle, *The Paris Agreement: Historic Breakthrough or High Stakes Experiment*, Climate L. (forthcoming 2016), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2708148.
19. UNFCCC, Intended Nationally Determined Contributions, http://unfccc.int/focus/indc_portal/items/8766.php (last visited Jan. 11, 2016). Note that since the conclusion of the negotiations in Paris in December 2015, these are being referred to as "nationally determined contributions." *See, e.g., id.*
20. Climate Action Tracker, *Tracking INDCs*, http://climateactiontracker.org/indcs.html (last visited Jan. 11, 2016).
21. Canada's INDC Submission to the UNFCCC (2015), *available at* http://www4.unfccc.int/submissions/INDC/Published%20Documents/Canada/1/INDC%20-%20Canada%20-%20English.pdf; United States' INDC Submission to the UNFCCC (2015), *available at* http://www4.unfccc.int/submissions/INDC/Published%20Documents/United%20States%20of%20America/1/U.S.%20Cover%20Note%20INDC%20and%20Accompanying%20Information.pdf.
22. *See* David McLaughlin, *Same Song, Different Harmony: Canada-US Climate Policy*, Pol'y Mag. (Sept./Oct. 2014), *available at* http://policymagazine.ca/pdf/9/PolicyMagazineSeptember-October-14Mclaughlin.pdf. *See also* National Round Table on Environment and Economy, *Parallel Paths: Canada-U.S. Climate Policy Choices* (2011), *available at* http://www.naviusresearch.com/data/resources/Parallel_Paths.pdf.
23. Canada's INDC Submission, *supra* note 21.
24. United States' INDC Submission, *supra* note 21.
25. *Id.* at 4-5; Canada's INDC Submission, *supra* note 21, at 3.
26. H.R. 2454, 111th Cong. (as passed by the U.S. House of Representatives, June 26, 2009).
27. Government of Canada, Turning the Corner: Taking Action to Fight Climate Change (2008), *available at* http://publications.gc.ca/collections/collection_2009/ec/En88-2-2008E.pdf.
28. *See* Government of Canada, *The 2012 Progress Report of the Federal Sustainable Development Strategy* (2012), https://www.ec.gc.ca/dd-sd/default.asp?lang=En&n=AD1B22FD-1 (Target 1.1 sets out the sector-by-sector regulatory approach). It should be noted that Prime Minister Justin Trudeau had suggested a "Medicare approach" to climate action that allowed for differences across provinces with coordination at the federal level. *See* Liberal Party of Canada, *Justin Trudeau Pitches a Medicare Approach to Fight Climate Change in Canada*, Feb. 7, 2015, https://www.liberal.ca/justin-trudeau-pitches-medicare-approach-to-fight-climate-change-in-canada/. A key early commitment made by Prime Minister Trudeau after his election in October 2015 was to work with provinces and establish "a pan-Canadian framework for combatting climate change" with a "national target" 90 days after the Paris climate negotiations. *See* Government of Canada, *Canada's Way Forward on Climate Change* (2015), http://www.climatechange.gc.ca/default.asp?lang=En&n=72F16A84-1 [hereinafter Canada's Way Forward]. There have been no clear indications on whether or how this will change the sector-by-sector regulatory approach pursed by the last federal government. However, the provinces, territories, and federal government did come together 90 days after the Paris Agreement, agreeing to the Vancouver Declaration, a political framework document purporting to set the stage for a "pan-Canadian framework for clean growth and climate change." Vancouver Declaration on Clean Growth and Climate Change, Canadian Intergovernmental Conference Secretariat (Mar. 3, 2016), http://www.scics.gc.ca/english/Conferences.asp?a=viewdocument&id=2401. *See also* Susan Lunn & David Cochran, *Trudeau, Premiers Agree to Climate Plan Framework, but No Specifics on Carbon Pricing*, CBC News, Mar. 3, 2015, http://www.cbc.ca/news/politics/first-ministers-premiers-trudeau-1.3474380.
29. One might think of the Canadian and U.S. situations as microcosms of the international circumstance in that there has been an inability to reach wide agreement across all jurisdictions, so a subnational bottom-up approach has

of these actions include creation of subnational carbon markets that provide a basis for cross-border linkages.[30] A summary of these follows.

B. Canada

In Canada, each province has a GHG emission reduction target, each with varying degrees of ambition.[31] Different provinces have put in place different measures to achieve targets.[32] To date, three provinces, Alberta, British Columbia, and Quebec, have created carbon markets, with Ontario and Manitoba soon to follow.[33] Demonstrating some bottom-up tendencies of its own, the situation in Canada has seen different provinces take different approaches to structuring their carbon markets.

Alberta was the first Canadian province to price carbon emissions when it put in place the Specified Gas Emitters Regulation in 2007.[34] This measure required certain major emitters to reduce annual carbon emission intensity by 12%, and included options for buying offsets or contributing to a technology fund at a price of CAN$15 per ton.[35] Changes to this regime are underway, however, led by a new provincial government elected in May 2015. Things are moving quickly. In November 2015, Alberta announced an economywide price on carbon that will be implemented through a hybrid approach that employs carbon tax and cap-and-trade features.[36] The price will start at $20/ton in 2017 and rise to $30/ton by 2018, at which point Alberta and British Columbia will have the same carbon price.[37] The province also plans to legislate a total emissions limit on oil sands at a maximum of 100 metric tons per year.[38]

British Columbia implemented a revenue-neutral economywide carbon tax in 2008,[39] taxing all who consume fossil fuels in the province.[40] The revenue generated is cycled back to British Columbians in the form of reductions in income taxes.[41] The price on carbon started at $10/ton and rose by $5 per year until it reached the current level of $30/ton.

Most relevant for the purposes of this Article, Quebec established a cap-and-trade regime that started operating on January 1, 2013.[42] Businesses in the industrial, electricity, and fossil fuel distribution sectors that emit 25,000 metric tons of carbon dioxide (CO_2) equivalent per year or more are subject to the system.[43] More detailed information about Quebec's system is provided below in the discussion about the linkage with California.

In addition to these existing subnational carbon markets in Canada, other provinces are following suit. Ontario has committed to implementing a cap-and-trade regime similar to Quebec's, with operation set to begin in 2017.[44] Once Ontario's cap-and-trade system is implemented, more than 80% of Canada's population will be living in a jurisdiction with a carbon price. Manitoba has also recently announced plans to implement a cap-and-trade system.[45]

C. United States

Similar to Canada, and also demonstrating bottom-up tendencies in the absence of comprehensive federal action, different states in the United States have different GHG emission reduction targets with different measures in place to achieve reductions.[46] While several states have considered implementing economywide carbon markets, only California has actually done so.

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emerged in each country where provinces and states lead by doing what they feel is possible. For a concise description of the significant contribution of provincial efforts in reducing Canada's GHG emissions, see Office of the Auditor General of Canada, Fall 2014 Report of the Commissioner for the Environment and Sustainable Development (CESD), Ch. 1: Mitigating Climate Change 15-17 (2014), *available at* http://www.oag-bvg.gc.ca/internet/docs/parl_cesd_201410_01_e.pdf [hereinafter CESD]. For a snapshot of state climate action, see Center for Climate & Energy Solutions, *U.S. States and Regions Climate Action*, http://www.c2es.org/us-states-regions (last visited Jan. 6, 2015).

30. These are set out in the paragraphs that follow. Note that the Paris Agreement includes provisions that contemplate a role for "non-state" "subnational authorities." *See* Paris Agreement, *supra* note 11, at art. 134.
31. *See* CESD, *supra* note 29, at 15.
32. As discussed below, this situation is changing rapidly. For an overview, see generally Miranda Holms, David Suzuki Foundation, All Over the Map 2012: A Comparison of Provincial Climate Change Plans (2012), *available at* http://www.davidsuzuki.org/publications/downloads/2012/All%20Over%20the%20Map%202012.pdf. *See also* Kroft et al., *supra* note 8.
33. *See* Canadian Press, *supra* note 3.
34. Government of Alberta, *Specified Gas Emitters Regulation*, Alberta Reg.139/2007 (Can.), *available at* http://www.qp.alberta.ca/documents/Regs/2007_139.pdf.
35. *See* International Emissions Trading Agency, Alberta: An Emissions Trading Case Study (2015), *available at* https://ieta.memberclicks.net/assets/CaseStudy2015/alberta-case-study-ieta-edf-cdcclimat%20_28042015.pdf.
36. Government of Alberta, *Climate Leadership Plan* (2015), http://www.alberta.ca/climate-leadership-plan.cfm [hereinafter Alberta Climate Plan].
37. *Id.*
38. *Id.*
39. *See* Government of British Columbia, *Climate Action Legislation*, http://www2.gov.bc.ca/gov/content/environment/climate-change/policy-legislation-programs/legislation-regulations (last visited Jan. 6, 2016).
40. *Id.*
41. Government of British Columbia, Budget and Fiscal Plan 2014/15-2016/17, 64-66 (2014), *available at* http://bcbudget.gov.bc.ca/2014/bfp/2014_budget_and_fiscal_plan.pdf#page=74. British Columbia now has the lowest income tax rates in Canada for individuals earning up to CAN$122,000, a result the province attributes to the carbon tax. *See* British Columbia Ministry of Finance, *Tax Cuts Funded by the Carbon Tax*, http://www.fin.gov.bc.ca/tbs/tp/climate/A2.htm (last visited Jan. 6, 2016).
42. Government of Quebec, The Quebec Cap-and-Trade System and the WCI Regional Carbon Market: A Historical Overview (2015), *available at* http://www.mddelcc.gouv.qc.ca/changements/carbone/documents-spede/historical-overview.pdf.
43. *Id.*
44. This time line was released as part of public consultation ahead of the Paris climate change negotiations. *See* Adrian Morrow, *Ontario Prepared to Implement Cap-and-Trade System to Decrease Carbon Emissions*, Globe & Mail, Nov. 13, 2015, *available at* http://www.theglobeandmail.com/news/national/ontario-prepared-to-implement-cap-and-trade-system-to-decrease-carbon-emissions/article27263562/. For related analysis by a leading Canadian expert, see Nic Rivers, *Details Matter in Ontario's Cap and Trade System*, Pol'y Options, Nov. 2015, http://policyoptions.irpp.org/2015/11/18/details-matter-in-ontarios-cap-and-trade-system/.
45. Government of Manitoba, Manitoba's Climate Change and Green Action Plan 22-23 (2015), *available at* https://www.gov.mb.ca/conservation/climate/pdf/mb-climate-change-green-economy-action-plan.pdf.
46. *See U.S. States and Regions Climate Action*, *supra* note 29.

California's cap-and-trade regime began operation on January 1, 2013.[47] This is the state's foundational program for meeting its broader goal of reducing total GHG emissions to 1990 levels by 2020. The regime initially covered large electric power plants and large industrial facilities such as oil and gas and cement production plants. In 2015, the program expanded to include distributors of natural gas and fuels, now covering 85% of the state's total emissions.[48] More detail is provided in Part IV below, which lays out details of the Quebec-California linkage.

D. Evolution in Canada-U.S. Linkages

Cooperation between Canadian and U.S. subnational jurisdictions has been taking place for almost a decade,[49] evolving over the years. This section summarizes the recent and current landscape of cross-border carbon cooperation. Initiatives include softer arrangements, or "harmonization networks,"[50] with primarily political bases rather than linkages with legal underpinnings. They are, however, helpful context given that most started in anticipation of more formal future arrangements. In a sense, initiatives over the past decade can be viewed as steps toward the California-Quebec linkage and beyond (that is, a path to a continent-wide carbon market).

The "Under 2 MOU" initiative, led by California, centers on a political agreement between subnational governments around the world in the form of a memorandum of understanding (MOU).[51] The MOU expresses a commitment to either reducing their GHG emissions to 80-95% below 1990 levels by 2050 or to achieving a per capita emissions target of less than 2 metric tons by 2050.[52] It is premised on the stated view that "[b]y working together and building on agreements such as the Declaration of Rio de Janeiro 2012 . . . , subnational governments, together with interested nations, can help to accelerate the world's response to climate change and provide a model for broader international cooperation among nations."[53] The MOU also lays out broader bases of cooperation in areas such as information-sharing, adaptation to climate change impacts, and capacity-building.[54] At the time of the 2015 international climate change negotiations in Paris, 152 jurisdictions had signed on, representing more than 720 million people and $19.9 trillion in combined gross domestic product.[55] This included the provinces of British Columbia, Ontario, and Quebec, and the states of California, Minnesota, New Hampshire, New York, Oregon, and Washington. As explicitly stated in the MOU, it is "neither a contract nor a treaty."[56]

In a narrower geographic sphere, several regional cooperative initiatives exist across North America, with some overlap. In 2008, Alaska, California, Oregon, Washington, and British Columbia, making up the four American states and one Canadian province that share the North American Pacific coastline, entered into the Pacific Coast Collaborative Agreement (PCCA).[57] The broad scope of collaboration covers many sectors and issues, including climate change. In 2013, the parties adopted a Pacific Coast Action Plan on Climate and Energy.[58] Notably from a cross-border perspective, it stated that "[w]here possible, California, British Columbia, Oregon and Washington will link programs for consistency and predictability and to expand opportunities to grow the region's low-carbon economy."[59] It also included commitments to harmonize long-term GHG emission reduction targets, to cooperate with governments around the world toward an international agreement on climate change in 2015, and to support integration of the region's electricity grids.[60] Ambition and pledges in the PCCA are tempered by the closing provision that "[t]his Action Plan shall have no legal effect; impose no legally binding obligation enforceable in any court of law or other tribunal of any sort, nor create any funding expectation; nor shall our jurisdictions be responsible for the actions of third parties or associates."[61]

On the other side of the continent, the Regional Greenhouse Gas Initiative (RGGI) has been in place since 2005.[62] The RGGI is an interstate cap-and-trade program to limit CO_2 emissions across Connecticut, Delaware, Maine,

47. *See* Government of Quebec, The Quebec-California Carbon Market and the Future Membership of Ontario (2015), *available at* http://www.mddelcc.gouv.qc.ca/changements/carbone/documents-spede/linking-quebec-california.pdf.
48. *See* CARB, An Overview of ARB Cap-and-Trade (2015), *available at* http://www.arb.ca.gov/cc/capandtrade/guidance/cap_trade_overview.pdf.
49. For example, the New England Governors and Easter Canadian Premiers forum adopted a Climate Change Action Plan in 2001. *See* Atlantic Conference of Premiers, *New England Governors and Eastern Canadian Premiers' Annual Conference*, http://www.cap-cpma.ca/about/new-england-governors-and-eastern-canadian-premiers-annual-conference-negecp/ (last visited Jan. 6, 2016) (listing the 2001 climate change plan as one of the group's specific accomplishments).
50. The term "harmonization network" was used by Jeremy Lawrence to characterize the early work of the Western Climate Initiative. *See* Jeremy Lawrence, *The Western Climate Initiative: Cross-Board Collaboration and Constitutional Structure in the United States and Canada*, 82 S. Cal. L. Rev. 1225 (2008-2009). *See also* Dallas Burtraw et al., *Linking by Degrees: Incremental Alignment of Cap-and-Trade Markets* (Resources for Future, Discussion Paper, Apr. 2013).
51. *See* Global Climate Leadership Memorandum of Understanding, *available at* http://under2mou.org/wp-content/uploads/2015/04/Under-2-MOU-English.pdf [hereinafter Under 2 MOU].
52. *Id.* art. 2(A).
53. *Id.* art. I(D).
54. *Id.*
55. Under 2 MOU, *Signatories and Endorsers*, http://under2mou.org/?page_id=238 (last visited Jan. 5, 2016).
56. Under 2 MOU, *supra* note 51, at art. IV.
57. Pacific Coast Collaborative (PCC), Memorandum to Establish the Pacific Coast Collaborative (2008), *available at* http://www.pacificcoastcollaborative.org/Documents/Memorandum%20PCC.pdf.
58. PCC, Pacific Coast Action Plan on Climate and Energy (2013), *available at* http://www.pacificcoastcollaborative.org/Documents/Pacific%20Coast%20Climate%20Action%20Plan.pdf.
59. *Id.* It is interesting to note that Alaska, which is part of this Collaborative, did not sign onto this Action Plan. No explanation is provided in the Action Plan or associated materials.
60. *Id.*
61. *Id.* art. V. Similarly, the foundational PCC MOU states: "The parties agree that participation as a member of the Collaborative established in this Memorandum is voluntary and no party to this Memorandum may bring legal action to enforce any provision herein or amendment hereto." PCC, *supra* note 57, at art. 12.
62. *See* Regional Greenhouse Gas Initiative (RGGI), *Program Design Archive*, http://www.rggi.org (last visited Jan. 6, 2016).

Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont.[63] This market is not economy-wide; it includes only the electricity sector.[64] The program's relative success as a functioning carbon market has made it a well-known example in the United States, but it also has ties to Canada. At one stage, all six eastern Canadian provinces held observer status in anticipation of future-linked cap-and-trade markets.[65] At present, there is minimal cross-border activity, though provinces and states in the region continue to collaborate on climate matters through an annual conference and associated resolutions of the New England Governors and Eastern Canadian Premiers forum.[66]

Finally, and most relevant to the topic of this Article, there is the Western Climate Initiative (WCI). The WCI began in 2007 as an agreement across several western U.S. states and was expanded in subsequent years to include the Canadian provinces of British Columbia, Manitoba, Ontario, and Quebec.[67] Together, the 11 jurisdictions collaborated to produce the 2008 Design Recommendations for the WCI Regional Cap and Trade Program[68] and the 2010 Design for the WCI Regional Program.[69] The collective objective at the time was to eventually put in place an interjurisdictional market-based program to reach agreed-upon emission reduction targets.[70] Ultimately, most WCI members, except California and Quebec, did not follow through all the way to the point of implementing linked cap-and-trade systems under the agreed-upon time line.[71] Today, there is less collaborative work across WCI members.[72] Instead, most work has shifted to take place through the Western Climate Initiative, Inc. (WCI, Inc.), a nonprofit corporation formed to provide administrative and technical services to support the implementation of state and provincial GHG emissions trading programs.[73] More detail is provided in the discussion of the Quebec-California linkage in Part III.

From the WCI and its foundational design work came North America's first cross-border subnational cap-and-trade linkage. California and Quebec signed a linking agreement in September 2013, with the linkage becoming formally operational on January 1, 2014. In November 2015, they held the fifth joint auction of emission allowances; a sixth was announced for February 2016.[74]

A detailed anatomy of the California-Quebec linkage and related regulatory framework is set out in Part III, but before proceeding any further, it is important to clearly describe what is meant by "linkage" and the perceived associated benefits. A linkage occurs when an emissions trading system in one jurisdiction recognizes a market instrument (that is, a unit of credit for reducing carbon emissions) from another system and allows use of that instrument to meet the compliance objective of the first system (in other words, a carbon credit as an intersystem fungible good).[75] These linkages can be unilateral, bilateral, or multilateral.[76] The California-Quebec market is a bilateral linkage and is the first multisector linkage between subnational governments across an international border.[77] Formal linkages of this nature stand in contrast to the softer interjurisdictional political agreements discussed above, such as the PCCA and Under 2 MOU.

Given that the later portions of this Article will discuss risks and challenges associated with linking subnational carbon markets, it is important to set out here the rationale behind taking such a step in the first place. Different commentators have articulated the benefits in different ways, but perhaps the most succinct explanation distills the picture into four benefits: political, economic, administrative, and policy.[78] Politically, linkages demonstrate prog-

63. *See* RGGI, *Program Design*, http://www.rggi.org/design (last visited Jan. 6, 2016). Note that New Jersey withdrew as of January 1, 2012.
64. *Id.*
65. Once the RGGI became fully operational, it stopped using observer status as a term or designation. Instead, today, any interested person, state, or other stakeholder is allowed to attend a meeting or provide comment, without need for a designated status. This was confirmed through the author's direct correspondence with RGGI staff (Dec. 2, 2015).
66. This includes governors of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont, along with premiers of New Brunswick, Newfoundland and Labrador, Nova Scotia, Prince Edward Island, and Quebec. At the annual conference in August 2015, this group adopted Resolution 39-1, which adopted, inter alia, a common long-term GHG emissions reduction range: "2030 reduction marker range of at least 35%-45% . . . below 1990 levels." The resolution also stated that the "governors and premiers recognize the value and benefit of working regionally to increase the effectiveness of collective actions." *See* Atlantic Council of Premiers, 39th Annual Conference of New England Governors and Eastern Canadian Premiers, Resolution 39-1, Resolution Concerning Climate Change (2015), *available at* http://www.cap-cpma.ca/data/Signed%2039-1En.pdf. No mention was made, however, of cap-and-trade markets or potential linkage. This is no doubt related to the fact that the four Atlantic Canadian provinces remain without clear intention or plans to create carbon markets.
67. *See* Western Climate Initiative (WCI), *History*, http://www.westernclimateinitiative.org/history (last visited Jan. 6, 2016).
68. WCI, Design Recommendations for the WCI Regional Cap and Trade Program (2008), http://www.westernclimateinitiative.org/the-wci-cap-and-trade-program/design-recommendations.
69. WCI, Design for the WCI Regional Program (2010), http://www.westernclimateinitiative.org/the-wci-cap-and-trade-program/design-recommendations.
70. *See* WCI, Design for the WCI Regional Program (2010), http://www.westernclimateinitiative.org/the-wci-cap-and-trade-program/program-design.
71. *See* WCI, *supra* note 68.
72. WCI did make more progress than the Midwestern Greenhouse Gas Reduction Accord (MGGRA), however. MGGRA was a 2007 agreement between six midwestern states and the premier of the Canadian province of Manitoba to reduce GHG emissions through a regional cap-and-trade program and other complementary policy measures. Though MGGRA has not been formally suspended, participating states are no longer pursuing it. *See* Center for Climate & Energy Solutions, *Midwest Greenhouse Gas Reduction Accord*, http://www.c2es.org/us-states-regions/regional-climate-initiatives/mggra (last visited Jan. 6, 2016).
73. *See* WCI, Inc., http://www.wci-inc.org (last visited Jan. 6, 2016). *See also* WCI, Inc., Certificate of Incorporation (2011), *available at* http://www.wci-inc.org/docs/Certificate_of_Incorporation.pdf.
74. News Release, CARB, California and Quebec Release Results for Fifth Joint Cap-and-Trade Auction (Nov. 24, 2015), http://www.arb.ca.gov/newsrel/newsrelease.php?id=775; CARB, *Auction Notice*, *supra* note 7.
75. *See* Burtraw et al., *supra* note 50. Linkage is defined in the California Government Code §12894(e) as "an action taken by the State Air Resources Board . . . that will result in acceptance . . . of compliance instruments issued by any other governmental agency." Cal. Gov't Code §12894(e), http://www.leginfo.ca.gov/cgi-bin/displaycode?section=gov&group=12001-13000&file=12894-12896.
76. For a detailed discussion of all types of linkages, see Burtraw et al., *supra* note 50. *See also* Ranson & Stavins, *supra* note 2.
77. International Emissions Trading Association, Quebec: An Emissions Trading Case Study 3 (2015), *available at* https://www.edf.org/sites/default/files/quebec-case-study-may2015.pdf.
78. Burtraw et al., *supra* note 50; *see also* Ranson & Stavins, *supra* note 2.

ress toward the increased cooperation needed to address the collective action barrier and free-rider risks associated with action (or inaction) on climate change.[79] Economically, a linkage can expand the market of potential emission reduction activities, leading to lower overall costs and reduced risks of leakage.[80] Administratively, linking jurisdictions benefit from sharing best practices and administrative procedures, and may also allow for streamlining across multiple markets that require the same services.[81] Finally, at the policy level, linkages can move thinking and understanding ahead to improve market design and shape national and international policy.[82]

No matter how attractive cross-border subnational linkages may be on different fronts, such advantages offer no shield from constitutional scrutiny. Each country's constitution has the final say on whether linkages may be established in that country, let alone expanded. It is in this context that the California-Quebec linkage has managed to emerge. The remainder of the Article focuses in this direction.

II. Anatomy of the California-Quebec Linkage

Linkage between the California and Quebec carbon markets is a product of regulations, guidance, government officials, and a formal agreement working in concert. At the center of the linkage is the "Agreement Between the California Air Resources Board [CARB] and the Gouvernement du Quebec Concerning the Harmonization and Integration of Cap-and-Trade Programs for Reducing Greenhouse Gas Emissions" (Linking Agreement).[83] The Linking Agreement essentially codifies collaboration between Quebec and California. The document comprises 20 articles spread across three chapters: General Provisions, Harmonization and Integration Process, and Operation of the Agreement.[84] Specific articles set out definitions and set the rules in key areas including consultation, regulatory harmonization, recognition and trade of compliance instruments, joint auctions, supervision and enforcement, administrative and technical support, confidentiality, withdrawal, amendments, resolution of differences, and coming into force.[85]

The legal framework around the Linking Agreement is reciprocal in nature, made up of a set of statutes, regulations, and guidance put in place by each jurisdiction in recent years. Aspects of these legal frameworks build on the earlier work of the WCI and were refined by Quebec and California in the lead-up to linking (and to some extent since) to ensure harmonized systems.[86] More specifically, governments worked closely together to ensure that program processes and procedures for activities related to issuing, tracking, and monitoring the trading compliance instruments were consistent and compatible such that compliance instruments could be transferred between market participants.[87] Each jurisdiction's legal backdrop is briefly summarized below.

Quebec's cap-and-trade system reflects the province's legislated objective to reduce GHG emissions to 20% below 1990 levels by 2020, as set out in Order in Council 1187-2009 of November 18, 2009.[88] The following laws are the primary pieces that make up the regulatory framework for Quebec's cap-and-trade system and the linkage with California:

- *Act to amend the Environment Quality Act and other legislative provisions in relation to climate change*,[89] which granted the Quebec government powers to enact regulations that create a cap-and-trade system and to enter into an agreement with another government "for the harmonization and integration of cap-and-trade systems."[90]
- *Regulation respecting mandatory reporting of certain emissions of contaminants into the atmosphere*[91] requires Quebec emitters that are within the thresholds of the system to report the emissions of contaminants derived from their activities, including GHG emissions.

79. Burtraw et al, *supra* note 50.
80. *Id.*
81. *Id.*
82. *Id.*
83. Agreement Between the California Air Resources Board and the Gouvernement du Quebec Concerning the Harmonization and Integration of Cap-and-Trade Programs for Reducing Greenhouse Gas Emissions, CA-QC (2013), *available at* http://www.arb.ca.gov/cc/capandtrade/linkage/ca_quebec_linking_agreement_english.pdf [hereinafter Linking Agreement]. The Linking Agreement fulfilled the direction in CARB Resolution 13-7 to document the coordination process in a written agreement. *See* http://www.arb.ca.gov/cc/capandtrade/linkage/resolution13-7.pdf, at 9.
84. Linking Agreement, *supra* note 83.
85. *Id.*
86. Jean-Yves Benoit & Claude Cote, *Linkage Case Study: California and Quebec* (2015), *available at* https://ieta.memberclicks.net/assets/GHG-Market-Report/2014/ieta%202014%20ghg%20report%20-%20linkage%20case%20study-%20california%20and%20quebec%20-%20benoit%20and%20cote.pdf.
87. *See* Letter from CARB chair Mary Nichols to Governor Jerry Brown, Nov. 1, 2013, *available at* http://www.arb.ca.gov/cc/capandtrade/linkage/readiness_report_transmittal_final.pdf [hereinafter Mary Nichols letter]. It should be noted, however, that some have been critical of steps taken by California in the lead-up to linking. For example, one commenter has suggested that "resource shuffling" is taking place whereby regulated entities replace dirty imports with cleaner resources via transactions that create the false appearance of emissions reductions in California's market, without reducing net emissions to the atmosphere. *See* Danny Cullenward, *The Limits of Administrative Law as Regulatory Oversight in Linked Carbon Markets*, 1 UCLA J. Envt'l L. & Pol'y 33 (2015).
88. Order in Council No. 1187-2009, Québec Official Gaz., pt. 2, No. 49, Dec. 9, 2009, at 5871. For more-detailed context, see Government of Quebec, Quebec's Cap-and-Trade System for Greenhouse Gas Emission Allowances: Technical Overview (2014), *available at* http://www.mddelcc.gouv.qc.ca/changements/carbone/documents-spede/technical-overview.pdf.
89. Bill 42, *Act to Amend the Environment Quality Act and Other Legislative Provisions in Relation to Climate*, Québec Official Gaz., pt. 2, No. 34, Aug. 26, 2009, at 4387 (Can.) (at 3069 of English version), *available at* http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=5&file=2009C33A.PDF.
90. Environment Quality Act (R.S.Q., c. Q-2) §46.14. It was pursuant to this provision that the Linking Agreement was entered into.
91. Regulation respecting mandatory reporting of certain emissions of contaminants into the atmosphere (R.R.Q., c. Q-2, r. 15), https://www.canlii.org/en/qc/laws/regu/cqlr-c-q-2-r-15/latest/cqlr-c-q-2-r-15.html.

- *Regulation respecting a cap-and-trade system for greenhouse gas emission allowances*,[92] which sets the rules for operation of Quebec's cap-and-trade system, including which emitters are required to cover their emissions, the terms and conditions for registering for the system, the emission allowances that can be validly used (including offsets), the terms and conditions for the issue, use and trading of emission allowances, and the information that must be provided by emitters and other persons or municipalities that may register for in the system. This regulation is aimed at harmonizing Quebec and California's cap-and-trade systems and enabling them to be linked.[93]
- *Order in Council 1185-2012 Determination of annual caps on greenhouse gas emission units relating to the cap-and-trade system for greenhouse gas emission allowances for the 2013-2020 period*[94] sets GHG emissions caps in line with achieving Quebec's 2020 GHG emissions reduction goal.

California's cap-and-trade legal context is set by the 2006 Global Warming Solutions Act (generally referred to as AB 32).[95] AB 32 requires California to reduce its GHG emissions to 1990 levels by 2020[96] and empowers CARB to "adopt a regulation that establishes a system of market-based declining annual aggregate emission limits for sources or categories of sources that emit greenhouse gas emissions."[97] AB 32 also sets the stage for linkages by requiring CARB to "consult with other governments to facilitate the development of integrated and cost-effective regional, national and international greenhouse gas reduction programs." A cornerstone of AB 32 implementation is the cap-and-trade regime. The statute itself provides minimal detail and direction on this matter; rather, it gives authority and discretion to CARB to implement the regime through regulations. CARB has exercised this authority with fervor,[98] putting in place the following key regulations that create and govern California's cap-and-trade system and the linkage with Quebec:

- *Air Resources Board Regulation for the Mandatory Reporting of Greenhouse Gas Emissions*[99] sets GHG reporting and verification requirements for emitters within the California cap-and-trade system.
- *Air Resources Board Cap-and-Trade Regulation*[100] is the comprehensive set of rules for creation and operation of California's cap-and-trade regime,[101] including linkage to other systems like Quebec's.

In the lead-up to the California and Quebec linkage, the California Senate enacted SB 1018,[102] requiring the governor to make specific findings prior to CARB taking action to approve the linkage.[103] In particular, SB 1018 required the governor to confirm that the program to be linked has environmental and enforcement requirements that are "equivalent to or stricter than" the California program, that California be able to enforce its laws to constitutional limits, and that there be no "significant liability" imposed on California for any "failure" associated with linking to the Quebec program or related participation in WCI, Inc.[104] These requirements essentially provided further assurance for California, and were formally confirmed by way of letter from the governor to CARB.[105]

Description of the linkage architecture is not complete without highlighting WCI, Inc. and the Compliance Instrument Tracking System Service (CITSS). As mentioned briefly above, WCI, Inc. is a nonprofit corporation formed to provide administrative and technical services to support the implementation of state and provincial GHG emissions trading programs.[106] Its main activities are developing a compliance tracking system, administering allowance auctions, and conducting market monitoring of allowance auctions and allowance and offset certificate trading.[107] Perhaps the most critical function to effective operation of the linkage is the CITSS,[108] which is administered by WCI, Inc. CITSS is the registry of compliance instruments for the cap-and-trade program. It serves as a management and tracking system for accounts and compliance instruments issued through the cap-and-trade linkage.[109] It allows market participants to hold and retire

92. Regulation respecting a cap-and-trade system for greenhouse gas emission allowances (R.R.Q., c. Q-2, r. 46.1), https://www.canlii.org/en/qc/laws/regu/cqlr-c-q-2-r-46.1/latest/cqlr-c-q-2-r-46.1.html.
93. Government of Quebec, Technical Overview 4, *supra* note 88.
94. Order in Council No. 1185-2012, Québec Official Gaz., pt. 2, No. 51, Dec. 19, 2012, at 5613 (at 3612 of English version), *available at* http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=1&file=2389.pdf.
95. AB 32, *supra* note 6.
96. Note that on April 29, 2015, Gov. Jerry Brown issued Exec. Order B-30-15 setting the next GHG emission reduction goal at 40% below 1990 levels by 2030. Press Release, Office of Governor Edmund G. Brown Jr., Governor Brown Establishes Most Ambitions Greenhouse Gas Reduction Target in North America (Apr. 29, 2015), https://www.gov.ca.gov/news.php?id=18938.
97. AB 32, *supra* note 6, at 38564.
98. As described by a California lawyer in private practice, "CARB has been engaged in nearly non-stop rulemaking since January 2007 to implement AB 32." Nicholas W. van Aelstyn, *An Update on California's Cap-and-Trade Climate Change Policy: Continuing Forward, Perhaps Beyond California*, 45 Trends 17 (2013-2014).
99. Cal. Code Regs. tit. 17, §§95100-95158 (effective Jan. 1, 2015), *available at* http://www.arb.ca.gov/cc/reporting/ghg-rep/regulation/mrr-2014-unofficial-02042015.pdf.
100. *Id.* §§95800-96023, *available at* http://www.arb.ca.gov/cc/capandtrade/capandtrade/unofficial_c&t_012015.pdf.
101. *See Summary of California's Cap-and-Trade*, Ctr. for Climate & Energy Solutions, http://www.c2es.org/us-states-regions, http://www.c2es.org/us-states-regions/action/california/cap-trade-regulation (last visited Jan. 6, 2015).
102. Cal. Gov't Code §12894(f) (West 2013).
103. *Id.*
104. *See* Memorandum of Attorney General's Advice to the Governor Concerning Linkage of California and Quebec Cap-and-Trade Programs (Mar. 5, 2013), *available at* https://www.gov.ca.gov/docs/AG_Letter_SB_1018.pdf.
105. *See* Letter from Governor Brown to Mary Nichols, Chair, CARB (Apr. 8, 2013), *available at* https://www.gov.ca.gov/docs/Request_for_SB_1018_Findings.pdf.
106. WCI, Inc., *supra* note 73.
107. *Id.*
108. *Id.*
109. *Id.*

compliance instruments and to participate in transactions of compliance instruments with other account holders.[110] Put in basic terms, CITSS is what allows the market to do its work by facilitating the flow of tradable allowances.

III. Constitutional Constraints

There are greater differences between Quebec and California than merely language and weather (even with climate change factored in). These subnational jurisdictions are separated by an international border and, as such, governed by different constitutions. As federalist nations, Canada and the United States both impose constitutional limits on what provinces and states can and cannot do. Such rules affect the subnational governments' activities not only within national borders, but also *across* international borders, thus having implications in the cross-border carbon-market context.

Identifying and working through the constitutional constraints in this field is no simple task. In exploring the U.S. context, scholars have stated that "[a]lthough unsatisfying, the safest conclusion to draw in this context is that the recent foreign affairs activities of state and local governments exist in a constitutional fog, similar in many respects to the dim doctrinal haze that covers the interbranch distribution of foreign affairs authority at the federal level."[111] Similarly, in commenting on the Canadian and U.S. contexts together, another scholar has described constitutional dimensions of sub-federal cross-border cooperation as "largely uncharted territory."[112]

Nevertheless, some scholarly attention has been devoted to this area, particularly in the late 2000s as the WCI and RGGI were gaining momentum.[113] There has been less attention, however, in recent years despite the substantial changes in context discussed in this Article's introduction. Given that there is now an operational cap-and-trade market linkage across the Canada-U.S. border, the time is ripe to take a detailed look at that linkage against constitutional concerns. The section below summarizes (without resolving) the key constitutional constraints in Canada and the United States with reference to existing literature and case law. Part IV then relates the discussion to the linkage between California and Quebec, and leads into Part V's recommendations for steps that subnational and national governments could take to manage constitutional hurdles.

A. *United States*

Constraints imposed by the U.S. Constitution on cross-border carbon market linkages stem from the general premise that foreign relations and interstate affairs are the exclusive domain of the federal government.[114] Constitutional anchors for this federal power are found in the express provisions of the Treaty Clause[115] and the Compact Clause,[116] as well as through the Supremacy Clause.[117] These provisions form the basis for several doctrines relevant to cross-border subnational linkages; namely, statutory preemption under the Supremacy Clause and dormant foreign affairs preemption. As highlighted below, several sub-doctrines exist, each contributing to this area of constitutional law. Commentators have characterized the jurisprudence as "murky"[118] and "amorphous"[119] due to the variance in views expressed by the courts and similar diversity in legal commentary.

Turning first to statutory preemption under the Supremacy Clause, there are two relevant bases for preemption: express and implied. Express statutory preemption arises when a federal statute expressly provides that states are preempted from legislating in certain areas.[120] To date, the U.S. government has not done so in the climate change context. The most likely candidate in a GHG context, the Clean Air Act (CAA),[121] contains no such explicit preemption provision. Indeed, the recently released final EPA rule[122] under the CPP actually *requires* states to take action to reduce GHG emissions,[123] and allows for emissions trading across state borders.[124]

Implied statutory preemption entails two sub-doctrines: field preemption and conflict preemption. Field preemption arises when the federal government has regulated an area so comprehensively that it "occupies the field," demonstrating congressional intent for there to be no room for state activity on the matter.[125] Similar to the above conclusion regarding express preemption, given that there is no comprehensive federal GHG regulatory regime in place, it is clear that the field is not occupied. Having said this, the CAA and GHG regulations promulgated pursuant to it[126]

110. *Id. See also* CARB, *Compliance Instrument Tracking System*, http://www.arb.ca.gov/cc/capandtrade/markettrackingsystem/markettrackingsystem.htm (last visited Jan. 6, 2015).
111. Meyler & Kysar, *supra* note 5, at 1625.
112. Fabien Gélinas, *The Constitution of Agreement: A Brief Look at Sub-Federal Cross-Border Cooperation*, Mich. St. L. Rev. 1179 (2006).
113. *See supra* note 5 (collecting articles).
114. Erwin Chemerinsky, Constitutional Law: Principles and Policies 367, 402 (3d ed. 2006) (citing United States v. Curtiss-Wright Corp., 299 U.S. 304 (1936)). *See also* Chang, *supra* note 5.
115. U.S. Const. art. 1, §10, cl. 1.
116. *Id.* cl. 3.
117. *Id.* §1, cl. 2.
118. Welton, *supra* note 5 at 36; Chang, *supra* note 5, at 10771.
119. Chang, *supra* note 5, at 10774. *See also* Meyler & Kysar, *supra* note 5, at 1625 ("Although unsatisfying, the safest conclusion to draw in this context is that the recent foreign affairs activities of state and local governments exist in a constitutional fog, similar in many respects to the dim doctrinal haze that covers the interbranch distribution of foreign affairs authority at the federal level.").
120. Chemerinsky, *supra* note 114, at 396.
121. 42 U.S.C. §§7401-7671q, ELR Stat. CAA §§101-618.
122. CPP, *supra* note 9.
123. *Id.*
124. *Id.* at 64734, 64806, 64835. Note that implementation of the CPP is in limbo since the Supreme Court issued a stay on the matter. In a 5-to-4 ruling that did not explain its reasoning, the Court essentially ordered the Barack Obama Administration to not take any steps to carry out the CPP until it has been judicially reviewed on its merits. *See* Adam Liptak & Coral Davenport, *Supreme Court Deals Blow to Obama's Efforts to Regulate Coal Emissions*, N.Y. Times, Feb. 9, 2016, http://www.nytimes.com/2016/02/10/us/politics/supreme-court-blocks-obama-epa-coal-emissions-regulations.html?_r=0.
125. Chemerinsky, *supra* note 114, at 401-02.
126. U.S. EPA, *Climate Change, Regulatory Initiatives*, http://www3.epa.gov/climatechange/EPAactivities/regulatory-initiatives.html (last visited Jan. 6,

represent federal legislative activity and states must respect their supremacy.

State action that makes compliance with both federal and state law impossible or stands as an obstacle to accomplishing the purposes or objective of a federal statute will be an instance of conflict preemption.[127] Offending state law will be struck by the courts in such cases. However, as articulated by other commentators,[128] jurisprudence has not produced absolute clarity. In *Crosby v. National Foreign Trade Council (NFTC)*,[129] the U.S. Supreme Court considered a Massachusetts law prohibiting business with Burma (due to human rights concerns). The Court found it to be unconstitutional because it was at odds with a federal law that gave the president control over economic sanctions in that context.[130] In its constitutional analysis, the Court stated that such a determination is to be informed by considering the strength of the state interest at issue and "examining the federal statute as a whole."[131]

The case of *American Insurance Association v. Garamendi*[132] expanded the basis upon which a state law may be found unconstitutional.[133] That case dealt with a California law that required insurers to disclose information on outstanding Holocaust-era claims. The Court struck down the law, finding that it imposed more onerous requirements on insurers than those negotiated by the president, contained in an executive agreement with Germany. In what has been called the *Garamendi* version of conflict preemption,[134] the Court ruled that a state law need not be preempted by a federal statute; instead, it can be preempted by executive branch foreign *policy* embodied in an executive agreement.

Some have viewed *Garamendi* as a significant expansion of the law as stated in *Crosby*.[135] Where *Crosby* dealt with a federal statute on the matter, the federal activity in *Garamendi* was focused on executive conduct in the form of executive agreements and statements from the executive branch. Uncertainty persists in this area[136]; however, two preoccupations of the Court can be distilled: concern over compromising the president's negotiating or bargaining position,[137] and concerns with obstacles to accomplishing the purposes or objective of a federal statute. The case law suggests that state action wading into these areas of concern runs the risk of being ruled unconstitutional.

In situations where federal statutory preemption does not apply, dormant foreign affairs preemption may still preempt state action. Two sub-doctrines would be engaged: dormant foreign affairs power and the dormant foreign Commerce Clause. *Zschernig v. Miller*[138] sets out the dormant foreign affairs power. In that case, a Cold War-era Oregon law prohibited inheritance by nonresident aliens unless there were reciprocal rights in the alien's home country. The Supreme Court invalidated the statute, ruling that even though it was in a traditional area of state regulation (inheritance), it was "an intrusion by the State into the field of foreign affairs which the Constitution entrusts to the President and the Congress,"[139] and that the Constitution does not permit a state "to establish its own foreign policy" nor "impair the effective exercise of the Nation's foreign policy."[140] Notwithstanding these strong words from the Supreme Court, commentators have debated the strength of the holding,[141] some noting that the more recent *Garamendi* decision acknowledged *Zschernig* but did not rely on it.[142]

The dormant foreign Commerce Clause enjoys stronger footing. It flows from the Commerce Clause in Article I, §8, granting the U.S. Congress the power to "regulate Commerce with foreign Nations, and among the several States."[143] The law is chiefly shaped by two cases. In *Japan Line, Ltd. v. County of Los Angeles*,[144] the Court struck down a California state tax on foreign shipping containers because there was a federal foreign policy in place prohibiting such measures. Pointing to Congress' exclusive authority over foreign commerce, the Court held that state measures may not impede the federal government's ability to speak with "one voice."[145] Notably, the court also held that the dormant foreign Commerce Clause, which is a variant of the interstate dormant Commerce Clause,[146] should attract a "more extensive constitutional inquiry."[147] Commentators have pointed out that the policy premise here is that one state should not detrimentally affect the interests of the nation.[148] In the more recent case of *Barclays Bank v. Franchise Tax Board*,[149] the Supreme Court softened its stance when it upheld a California international tax scheme and indicated that the Court would not invalidate a state policy if it could not discern congressional intent.[150]

In addition to federal power and associated preemption flowing from the Supremacy Clause, states are also constrained by the express provisions of the Treaty Clause in Article 1, §10, Clause 1, and the Compact Clause in Article 1, §10, Clause 3. These clauses plainly preclude states from entering into treaties. Article 1, §10, Clause 1, states: "No State shall enter into any treaty, alliance, or confederation." Perhaps owing to its relative clarity, case law on this provi-

2016).
127. *See* Chang, *supra* note 5; *see also* Chemerinsky, *supra* note 114, at 409.
128. Chang, *supra* note 5; Chemerinsky, *supra* note 114, at 409.
129. 530 U.S. 363 (2000).
130. *Id.*
131. *Id.* at 373.
132. 539 U.S. 396 (2003).
133. Welton, *supra* note 5, at 38.
134. *Id.*
135. *Id. See also* Chang, *supra* note 5.
136. Welton, *supra* note 5; Meyler & Kysar, *supra* note 5.
137. In fact, the Court in *Crosby* used the metaphor of bargaining chips, noting that the Massachusetts law "reduces the value of the chips created by the federal statute." Crosby v. NFTC, 530 U.S. 363, 377 (2000).
138. 389 U.S. 429 (1968).
139. *Id.* at 440.
140. *Id.* at 441.
141. *See* Lawrence, *supra* note 5, at 226.
142. *See, e.g.*, Welton, *supra* note 5, at 38.
143. U.S. Const. art. 1, §8, cl. 3.
144. 441 U.S. 434 (1979).
145. *Id.* at 446, 452.
146. The leading case for interstate situations is *Pike v. Bruce Church, Inc.*, 397 U.S. 137 (1970).
147. *Japan Line*, 441 U.S. at 446. *See* Chang, *supra* note 5, at 10779.
148. *Id.*
149. 512 U.S. 298 (1994).
150. *Id.*

sion is thin. The 1840 decision in *Holmes v. Jennison* continues to be the law today. *Holmes* involved an informal extradition arrangement between Vermont's governor and, coincidentally, Quebec (then known as the British colony of "Lower Canada").[151] The Court ruled that the arrangement was unconstitutional because under international law, only nation states could enter into extradition treaties, and that this arrangement constituted such a treaty. In reaching this conclusion, however, Chief Justice Roger B. Taney did create a distinction between treaties, as contemplated in the Treaty Clause, and agreements. Just what constitutes the basis for such distinction remains unresolved in the law[152]; however, there is generally understood to be room for states to enter into agreements with other governments.[153]

Parameters of the theory are shaped by the Compact Clause in Article 1, §10, Clause 3, which states: "No State shall, without the Consent of the Congress . . . enter into any Agreement or Compact with another State, or with a foreign Power" without approval from Congress.[154] Courts have interpreted this to not prohibit all compacts or agreements with other states that have not received congressional approval. In the leading case, *U.S. Steel Corp. v. Multistate Tax Commission*,[155] the Supreme Court determined that the question is whether the agreement "is directed to the formation of any combination tending to increase the political power in the States, which may encroach upon or interfere with the just supremacy of the United States." More recent dicta from the Supreme Court also spoke to this area of law. In the majority opinion in *Massachusetts v. EPA*, a seminal case on federal authority to regulate GHG emissions under the CAA, Justice John Paul Stevens stated: "When a State enters the Union, it surrenders certain sovereign prerogatives. Massachusetts cannot invade Rhode Island to force reductions in greenhouse gas emissions, *it cannot negotiate an emissions treaty with China or India*."[156]

How this jurisprudence applies in relation to the California-Quebec linkage is untested to date. Part IV presents an analysis of the linkage against these constitutional constrains, but first, the Canadian constitutional context is summarized below.

B. Canada

Jurisdiction over the environment in Canada has long been regarded as shared between provinces and the federal government.[157] Within this context, it is widely agreed that provinces have constitutional authority to regulate GHG emissions by virtue of their authority over natural resources and "property and civil rights."[158] Indeed, GHG emissions regulations have been in place in many provinces for several years[159]; none have been ruled to be unconstitutional. However, authority over foreign affairs and treaties is less clear.

Unlike the situation in the United States, the Canadian Constitution is silent on the matter of authority over international affairs and treaties.[160] It has no express provisions in the likeness of Compact Clause or Supremacy Clause.[161] Similarly, there is no Canadian analogue to the doctrine of foreign affairs preemption.[162] The division of powers between provincial and federal governments set out in §§91 and 92 of the Canadian Constitution includes no reference to these matters, largely because at the time of the Confederation and in years that immediately followed, foreign affairs were the prerogative of the British Crown. As one scholar explains, §132 of the Constitution Act of 1867 provides that the "Parliament of Canada has exclusive authority to enact legislation necessary in order to implement treaties signed by Britain on Canada's behalf"; however, the drafters of the Act "did not anticipate that Canada would eventually acquire the status of a fully independent state and enter into treaties with foreign states on its own behalf."[163]

Today, it is generally recognized that the Canadian federal government has authority to enter into treaties,[164] but implementation is a shared endeavor to be done in line with the constitutional division of powers.[165] The situation is

151. 39 U.S. 540 (1840).
152. *See* Lawrence, *supra* note 5, at 1252.
153. *Id.* at 1251.
154. It should be noted that congressional approval of the California-Quebec linkage is not considered here. Congressional approval would eliminate the constitutional risks identified in this Article, but such action is not foreseeable given gridlock in Congress over climate change, a subject discussed in Part IV.
155. 434 U.S. 452, 471 (1978).
156. 549 U.S. 497, 1454, 37 ELR 20075 (2007) (emphasis added). It is not clear from the Court's decision whether it was interpreting the Compact Clause or one of the preemption doctrines; however, this statement of the Court is relevant in both realms.
157. *See* Jamie Benedickson, Environmental Law 25 (2d ed. 2002). *See also* Meinhard Doelle & Chris Tollefson, Environmental Law: Cases and Materials 166 (2d ed. 2013). This situation stems from the environment not being specifically referenced in the Canadian Constitution.
158. *See* Peter Hogg, *Constitutional Authority Over Greenhouse Gas Emissions*, Alta L. Rev. 507 (2009). *See also* Alastair Lucas & Jenette Yearsley, *The Constitutionality of Federal Climate Change Legislation* (U. of Calgary Sch. of Pub. Pol'y Research Papers, 2011); Shi-Ling Hsu & Robin Elliot, *Regulating Greenhouse Gases in Canada: Constitutional and Policy Dimensions*, McGill L. Rev. 463 (2009).
159. CESD, *supra* note 29.
160. *See* Laura Barnett, Library of Parliament, Canada's Approach to the Treaty-Making Process (2008). *See also* Hogg, *supra* note 158.
161. Barnett, *supra* note 160; Hogg, *supra* note 158.
162. For further discussion on this point, including reference to the case of *United States v. Curtiss-Wright Export Corp.*, 299 U.S. 304 (1936), see Gilbran Van Ert, *The Legal Character of Provincial Agreements With Foreign Governments*, 42 Les Cahiers de Droit 1093, 1106-07 (2001). *See also* Lawrence, *supra* note 5, at 1266; Thomas Levy, *Provincial International Status Revisited*, 3 Dalhousie L.J. 70 (1977) (contending that the federal government's strongest argument is one that it has been reluctant to press publicly (due to political complexities around Quebec and Canadian federalism): the inherent right of the central government of a sovereign state to deal with external relations). Note also that Canada does have the doctrine of federal "paramountcy" that deems provincial laws unconstitutional to the extent that there is a real and clear inconsistency with a federal law. In the GHG emissions regulation realm, this has been managed through "equivalency agreements" between the federal and provincial governments, an approach provided for in related federal legislation such as the Canadian Environmental Protection Act, S.C. 1999, c. 33.
163. Patrick Monahan, Constitutional Law 312 (2013). This provision is now generally regarded as inoperative.
164. *See* Barnett, *supra* note 160.
165. *See* Monahan, *supra* note 163; Hogg, *supra* note 158.

largely shaped by the 1937 *Labour Conventions* decision.[166] In that case, the Privy Council (Canada's highest court at the time, despite it being in England) ruled that just because the federal government signed and ratified a treaty, it could not pass laws that encroach on areas of exclusive provincial jurisdiction set out in §92. The Privy Council held that the power to implement treaties was divided between Parliament and the provinces, depending on the subject matter of the Treaty.[167] This has resulted in Canada having a dualist system of treaty implementation.[168] Treaties are not self-executing: When the executive signs a treaty, it is not considered part of domestic law until domestic legislation is passed.[169] As such, implementation of agreements, especially in environmental and natural resources matters, require significant action from provinces.

Despite the fact that the Canadian federal government does not recognize any provincial authority to make international agreements that would be enforceable in a court of law or otherwise binding,[170] some provinces disagree. Notably for the purposes of this Article, Quebec is one of them. That province has been characterized by one comparative law scholar as, "the most vocal proponent of provincial rights."[171] Quebec has taken the view that because the Canadian Constitution does not assign exclusive power to the federal government over foreign relations, the province may enter into agreements with other jurisdictions concerning matters within provincial authority.[172] Indeed, the province has put in place a law claiming power to enter into binding international agreements,[173] and has its own ministry of international relations, and officials from the government of Quebec have called the Linking Agreement, "a milestone in Quebec international relations."[174] This provincial law has not been challenged in court.

Case law in this area is minimal.[175] Only two cases have considered the capacity of provinces to enter into binding agreements. The 1955 Canada Supreme Court case of *A-G Ontario v. Scott*[176] involved an agreement between Ontario and the United Kingdom (U.K.) for reciprocal recognition of family maintenance orders. Defendant Scott (residing in the U.K.) challenged an Ontario order issued against him on the basis that the agreement between the U.K. and Ontario constituted a treaty, and that a province lacked constitutional authority to enter into such. The court found that the arrangement was not a treaty because it did not exhibit the "essential element" of a treaty that has "binding effects between parties to it."[177] The court went on to state that "enactments of the two legislatures are complementary but voluntary; the application of each is dependent on that of the other; each is the condition of the other; but that condition possesses nothing binding to its continuance."[178] In its reasoning, the court relied on the fact that there was "no attempt to permit another legislature to enact general, or generally, laws for a province."[179] The *Scott* case has been interpreted by at least one commentator to mean that "the provincial right to enact reciprocal legislation in concert with foreign jurisdictions has been judicially sanctioned."[180]

The Quebec Court of Appeal Case of *Bazylo v. Collins*[181] supports that view.[182] This case involved an "entente" between the government of France and Quebec. Similar to *Scott*, the subject matter was reciprocal enforcement of family maintenance orders. Also similar to *Scott*, the court ruled that "[i]n spite of the formal appearance, . . . the Entente was simply an administrative arrangement between two jurisdictions and not a binding agreement, much less an international treaty."[183] In arriving at that conclusion, the court stressed that whatever the form of the agreement, "one must look beyond it to its substance."[184]

As several scholars have highlighted,[185] this remains an unsettled area of Canadian law. The cases of *Scott*, *Bayzlo*, and *Labour Conventions*, along with related commentary, do, however, provide some parameters with respect to what type of agreements are constitutionally permissible between a province and foreign jurisdiction. The reality of the Canadian context today is that there are many agreements in place between Canadian provinces and foreign governments and the practice has been commonplace for decades.[186] As noted by commentators, however, these agreements tend to be political "gentlemen's agreements."[187]

166. Canada v. Ontario, [1937] A.C. 326 (P.C.).
167. Monahan, *supra* note 163, at 269; *see also* Hogg, *supra* note 158, at 518.
168. Further clarity came in 1947 through the imperial Crown's delegation of powers over foreign affairs to the federal government. *See* Monahan, *supra* note 163, at 311 (citing Letters Patent Constituting the Office of Governor General and Commander-in-Chief of Canada, C. Gaz., Vol. LXXXI, No. 12 (Oct. 1, 1947)); Hogg, *supra* note 158, at 518.
169. *Id.*
170. *See* Barnett, *supra* note 160, at 1 ("the executive branch of government is the only branch of government with the authority to negotiate, sign and ratify international conventions and treaties").
171. Fabien Gelinas, *The Constitution of Agreement: A Brief Look at Sub-Federal Cross-Border Cooperation*, Mich St. L. Rev. 1179, 1187 (2006).
172. *See* Levy, *supra* note 162; Van Ert, *supra* note 162, at 1102.
173. An Act Respecting the Implementation of International Trade Agreements, R.S.Q. 2006, c. M-35.2 (Can. Que.). Alberta has a similar law. International Conventions Implementation Act, R.S.A. 2000, c. I-6 (Can. Alta.).
174. *See* Benoit & Cote, *supra* note 86. Jean-Yves Benoit and Claude Cote, both officials who led work on the Quebec side of the linkage, go on to state that "Quebec is actively reaching out to other governments within North America."
175. *See* Van Ert, *supra* note 162, at 1112 ("No Canadian Court has yet answered the question of the capacity of provincial governments to bind their provinces by treaty at international law."). A review of recent case law indicates that this situation has not changed.
176. [1955] S.C.R. 137 (Can.).
177. *Id.* at 142.
178. *Id.*
179. *Id.* at 143.
180. *See* Levy, *supra* note 162.
181. [1984] C.A. 268 (Can. Que. C.A.).
182. *Bazylo* was recently cited as legal authority in an MOU on transborder crime between the U.S. National District Attorneys Association and Quebec's Director of Criminal and Penal Prosecutions. *See* National Dist. Attorneys Ass'n, Model Memorandum of Understanding on Transborder Crime Between the NDAA and the DPCP (2011), *available at* http://www.ndaa.org/pdf/transborder_MOU_Resolution.pdf.
183. *Bayzlo*, C.A. 268, at 271.
184. *Id.*
185. *See, e.g.*, Van Ert, *supra* note 162; Levy, *supra* note 162.
186. *See* Levy, *supra* note 162, at 358-62; *see also* Gelinas, *supra* note 171.
187. Levy, *supra* note 162; Gelinas, *supra* note 171.

It is safe to say that constitutional limits in this sphere have not been fully tested.[188]

IV. Examining the Quebec-California Linkage in This Legal Context

As stated above, U.S. constitutional constraints are more limiting than Canadian. This is so much the case that at least one commentator, citing senior U.S. officials, has suggested that the Canadian federal government has been relatively inactive in policing provincial cross-border agreements with U.S. entities because they are "content to rely on the prohibitions on state governments becoming involved with other nations which are spelled out in the United States constitution."[189] This section discusses U.S. and Canadian constraints together, giving more attention to the U.S. context, but discussing Canadian dimensions as appropriate.

To frame the analysis, the constitutional and associated doctrinal constraints discussed above are presented as questions to be asked of the Linking Agreement. Given the relatively thin case law and murky status of jurisprudence in the field, the focus is on highlighting areas or characteristics that may be of concern, rather than reaching a firm conclusion as to how a court would decide. Indeed, as one commentator has posited in relation to foreign affairs preemption and in anticipation of a future linkage, "a fair reading of precedent could lead to either result"[190]—that is, finding linkages either constitutional or unconstitutional. Rather than engage in a clause-by-clause assessment of the Linking Agreement, the analysis focuses on several key attributes and features that may raise constitutional concerns:

1. Does the substance of the linkage go beyond a "complementary but voluntary" arrangement that has a binding effect or unduly increase subnational power?
2. Is the linkage expressly prohibited or, if not expressly prohibited, does it stand as an obstacle to accomplishing the purposes of a federal statute?
3. Does the linkage conflict with or impair the nation's foreign policy or foreign commerce interests?

A. *Does Linkage Go Beyond "Complementary but Voluntary"?*

Query: Does the substance of the linkage go beyond a "complementary but voluntary" arrangement that has a binding effect or unduly increases subnational power?[191]

Neither U.S. nor Canadian law treats favorably subnational agreements with foreign governments that substantively add up to a formal and binding international treaty. Due to constitutional silence, provinces have significantly more latitude here than states, but the cases of *Scott* and *Bayzlo* suggest that some limits do exist. On the U.S. side of the picture, the Treaty and Compact Clauses of the Constitution make clear that anything resembling a formal treaty is offside, particularly if it offends the rule in *U.S. Steel Corp.* by increasing state political power or interfering with the supremacy of the United States.

The Linking Agreement is provocative and risky in this realm on several fronts. First, its form strongly resembles a formal agreement, complete with articles dedicated to withdrawal, termination, amendments, resolution of differences, and coming into force. What's more, the linkage falls within the "international agreement" definition of "Chapter III—International Commitments" of the Quebec *Act Respecting the Ministère des Relations Internationales*.[192] This Act is referenced in the Linking Agreement preamble, along with reference to §46.14 of Quebec's Environmental Quality Act,[193] which require that such an agreement be put in place. Accordingly, a court may have a tenable basis to characterize this as an "international agreement" containing "international commitments."[194]

Second, several provisions of the Linking Agreement include strong language suggestive of a binding nature. For example, Article 4 states: "Parties *shall* continue to examine their respective regulation for mandatory reporting of greenhouse gas emissions and for the cap-and-trade program for reducing greenhouse gas emissions in order

188. Some may argue that the lack of testing is owed to Canada's sensitivity about constitutional arguments that keeps the federal government from taking firm positions against Quebec so as to not endanger the stability of the federation. *See, e.g.*, Levy, *supra* note 162, at 358-62. In that vein, the new Minister of Environment and Climate Change has cautioned that "moving too fast on climate could damage national unity." *See* Mike DeSouza, *Moving Too Fast on Climate Could Damage National Unity, Catherine McKenna Says*, Nat'l Observer, Apr.1, 2016, http://www.nationalobserver.com/2016/04/01/news/moving-too-fast-climate-could-damage-national-unity-catherine-mckenna-says.

189. *See* Levy, *supra* note 162, at 366.

190. *See* Chang, *supra* note 5, at 10772.

191. This question pertains primarily to Canadian constraints and those under the Compact Clause of the U.S. Constitution.

192. Act Respecting the Ministère des Relations Internationales, R.S.Q. 1988, c. M-25.1.1., s. 19 (Can. Que.). Section 19 states:

> The expression "international agreement" means an accord, whatever its particular designation, reached between the Government or one of its departments or agencies, on the one part, and a foreign government or one of its departments, an international organization, or an agency of such a government or organization, on the other part.

193. Environmental Quality Act, R.S.Q. c. Q-2, §46.14 (Can. Que.). Section 46.14 states:

> The Minister may, in accordance with the Act respecting the Ministère des Relations internationales (chapter M-25.1.1) or the Act respecting the Ministère du Conseil exécutif (chapter M-30), enter into an agreement with a government other than that of Québec, with a department of such a government, with an international organization or with an agency of such a government or organization for the harmonization and integration of cap-and-trade systems.

194. This is an open legal question in Canadian law. *See* Gelinas, *supra* note 171, at 111 ("No Canadian court has yet answered the question of the capacity of provincial governments to bind their provinces by treaty at international law."). For related analysis of how subnational carbon linkages under the WCI might be viewed under international law, see Lawrence, *supra* note 5, at 1241-43.

to promote continued harmonization and integration of the Parties' programs."[195] Article 4 contains several other "shall" clauses that push parties to continue working closely to ensure ongoing harmonization. Similarly, in dealing with Offset Protocols, Article 5 requires that "any proposed changes or additions shall be discussed between Parties."[196] The term "shall" is used more than 30 times throughout the Linking Agreement.

Finally, the thrust of several key articles could be viewed as binding by a court. The strongest instances of these are found in the provisions dealing with withdrawal and termination (some might call this "de-linking"[197]). Article 16 states: "A party may withdraw from this Agreement by giving *12 months* prior written notice to the other Party."[198] Though the language appears permissive on its face, it can only be read as a firm requirement to give 12 months' notice before de-linking. Added to this are the termination terms in Article 20, stating that the Agreement can only be terminated "pursuant to unanimous consent of the Parties in writing" and that such termination will be effective 12 months following such consent.[199] Together, these are not insignificant encumbrances on the parties.

The rationale behind such strong terms is easy to see: building market security by mitigating the risk of a disintegration of the linked carbon markets without notice. However, the price of managing that risk in this way is to open the door to the other risk of constitutional challenge. Even gauged against the weaker stance of the law in the Canadian context, this situation arguably has "binding effects between parties"[200] and may steer past what a court would consider an "administrative arrangement" that is merely "complementary but voluntary."[201] In the U.S. context, where a cross-border agreement may be treated to more scrutiny than an interstate agreement,[202] it is hard to see how these would not be seen by a court as *binding* terms that impinge government actions in a way tantamount to increasing state power and potentially interfering with U.S. supremacy. This would particularly be the case if either federal government took an interest in any dispute under the Agreement, which is plausible in future years.

The Linking Agreement was constructed in a manner that counterbalances those treaty-like characteristics to some degree. Most notably, one preambular provision states clearly that the "Agreement does not, will not and cannot be interpreted to restrict, limit or otherwise prevail over each Party's sovereign right and authority to adopt, maintain, modify or repeal any of their respective program regulations." How this squares with the rigid provisions discussed above is not clear, resulting in dissonance within the Agreement itself; nevertheless, the language is in there.

Additionally, the counterpoint to the above assertion that the Agreement contains strong language is that most of the "shall" provisions seem to be carefully dedicated to relatively soft activities such as notifying or consulting either party and discussing potential changes or problems. For example, Article 18's "resolution of differences" provisions only require the parties to "consult each other constructively" and to "resolve differences by using and building on established relationships."[203] While this provokes questions about how fundamental disputes might actually get resolved,[204] it does move the Agreement away from looking like a treaty.

Finally, the fact that this Agreement is between two subnational jurisdictions, rather than between a subnational and a nation state, may steer a court away from viewing it as a treaty. Indeed, Quebec and California may have a basis to argue that the Agreement would not be considered a treaty in international public law,[205] and so it should not be viewed as such by a domestic court (notwithstanding the reality that U.S. courts give less weight to international law).

B. Is Linkage Expressly or Impliedly Preempted?

Query: Is the linkage expressly prohibited or does it stand as an obstacle to accomplishing the purposes of a federal statute?[206]

Neither the federal government of the United States nor the federal government of Canada have enacted any laws that expressly prohibit cross-border carbon market linkages between states and provinces. Accordingly, express statutory preemption is not a material issue for linking agreements (though it remains theoretically possible that Congress could take this step).

Secondly, linkage does not stand in the way of any federal statute's purposes. As indicated in the introduction, neither Canada nor the United States has yet put in place comprehensive climate change legislation. Regulatory efforts to date have relied on existing legislative authorities, namely the CAA in the United States and the Canadian Environmental Protection Act[207] in Canada.

With respect to the CAA, the U.S. federal government has put in place GHG regulations in the time period since authority to do so was confirmed in 2007 in the seminal case of *Massachusetts v. EPA*.[208] The most relevant and recent activity under the CAA is the recently released CPP,[209] which explicitly allows for state cap-and-trade regimes and specifically states that the regulatory rule

195. Linking Agreement, *supra* note 83, at art. 4 (emphasis added).
196. *Id.* art. 5.
197. For a full discussion on de-linking, see William Pizer & Andrew Yates, *Terminating Links Between Emissions Trading Programs* (Resources for the Future, Discussion Paper No. 14-28, 2014).
198. Linking Agreement, *supra* note 83, at art. 16 (emphasis added).
199. *Id.* art. 20.
200. A-G Ontario v. Scott, [1955] S.C.R. 137, 142 (Can.).
201. *Id.*
202. *See* Welton, *supra* note 5, at 39.
203. Linking Agreement, *supra* note 83, at art. 18.
204. For a discussion on de-linking and what to do with existing credits in a trading regime, see Pizer & Yates, *supra* note 197.
205. *See* Lawrence, *supra* note 5, at 1241-43; Van Ert, *supra* note 162, at 1102.
206. This query corresponds primarily to the U.S. doctrines of express and implied preemption.
207. Canadian Environmental Protection Act, S.C. 1999, c. 33 (Can.).
208. 549 U.S. 497, 37 ELR 20075 (2007).
209. CPP, *supra* note 9.

would allow California to continue its current state program.[210] While some tweaking may be required by California to ensure consistency with the CPP,[211] the explicit consideration of California in the plan is a clear indication that the current state program does not stand in the way of federal purposes.[212]

The situation in Canada is not dissimilar. The federal government, through its sector-by-sector regulatory approach, has now put in place GHG regulations in a number of sectors, such as motor vehicles and electricity generation,[213] and has achieved harmony with provinces by using equivalency provisions[214] and negotiating equivalency agreements.[215] These provisions have allowed provinces to essentially meet or beat the federal requirements, and they do not preclude provinces from implementing carbon pricing regimes. For example, the province of Alberta recently released its updated climate plan, which includes regulations for coal-fired power plants that are more stringent than federal regulations, as well as an economywide carbon price.[216] In the Canadian context, this type of approach will be a core part of implementing the Paris Agreement due to the dualist system of treaty implementation.

Overall, the picture suggests that the California-Quebec linkage is consistent with the overarching purposes of relevant federal legislation and the slate of regulatory activities in place in both Canada and the United States.

C. Does Linkage Impair Foreign Interests?

Query: Does the linkage conflict with or impair the nations' foreign relations or foreign commerce interests?[217]

Though a legal matter, this area is inherently tied to the political sphere and one must examine that context to discern whether the California-Quebec linkage offends constitutional parameters. As discussed above, if the linkage is seen to have a "direct impact upon foreign relations and may well adversely affect the power of the central government to deal with those problems,"[218] then a U.S. court may point to *Zschernig* to find it unconstitutional under the dormant foreign affairs doctrine. Similarly, if the linkage is seen to impede the U.S. government's ability to speak with "one voice" in the foreign trade realm,[219] then a court may rely on *Japan Line* to impose constitutional parameters under the dormant foreign Commerce Clause.

Today, California and Quebec enjoy relatively favorable political conditions that significantly reduce the risks in this specific legal dimension. At the international level, recent support for the Paris Agreement by Canada and the United States, for example, is clear evidence that state, provincial, and federal climate policy is moving in the same general direction. At the domestic level, the Canadian federal government's cooperation with provinces and territories to produce a national framework[220] demonstrates a reasonable amount of consistency between all levels of government. Similarly, in the United States, notwithstanding ongoing tension and politicization about climate change in general,[221] especially among presidential candidates,[222] the president's statements at the Paris negotiations[223] and the administration's release of the CPP[224] both demonstrate strong consistency between foreign interests and California's state climate programs. These current realities, along with the fact that neither federal government has challenged the linkage or related regulatory schemes to date, bode well for the linkage, at least in the near term.

However, the linkage may draw constitutional fire in the future should political winds change. If a new president in 2016 is against action on climate change, withdraws from the Paris Agreement, and reverses President Barack Obama's domestic efforts, then the linkage could suddenly be at variance with U.S. foreign policy. In such a context, a court may find that the linkage adversely affects the federal government's power in foreign relations and offends the "one voice" test in the trade and commerce realm. In examining the matter, a court would almost certainly take note of the international ambitions of California and Quebec surrounding the linkage. Both have been open about indicating that they will continue to seek more partners in the linkage as part of their views that such cooperation is essential in their fight against climate change.[225]

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210. *Id.* at 64783. *See also* CARB, Clean Power Plan & Cap-and-Trade (2015), *available at* http://www.arb.ca.gov/cc/capandtrade/meetings/20151214/ctamendscpp.pdf.
211. *Id.* at 4-15.
212. Note that the future of the CPP is now in limbo due to the stay granted by the Supreme Court. *See* Liptak & Davenport, *supra* note 124.
213. Government of Canada, Dep't of Env't & Climate Change, *Greenhouse Gas Emission Regulations*, https://www.ec.gc.ca/cc/default.asp?lang=En&n=E97B8AC8-1 (last visited Jan. 6, 2016).
214. Government of Canada, Dep't of Env't & Climate Change, *Equivalency Agreements*, http://www.ec.gc.ca/lcpe-cepa/default.asp?lang=En&n=5CB02789-1 (last visited Jan. 6, 2015). *See also* Nigel Bankes, *Canada and Nova Scotia Finalize Equivalency Agreement on the Control of Greenhouse Gas Emissions in the Electricity Sector*, U. Calgary Faculty of Law Blog, Aug. 4, 2014, http://ablawg.ca/2014/08/05/4693/.
215. *See, e.g.*, An Agreement on the Equivalency of Federal and Nova Scotia Regulations for the Control of Greenhouse Gas Emissions From Electricity Producers in Nova Scotia Between the Government of Canada as Represented by the Minister of Environment and the Government of Nova Scotia as Represented by the Minister of Environment (2015), *available at* https://www.ec.gc.ca/lcpe-cepa/1ADECEDE-33F7-45D3-8F7B-69A361029E75/Accord-NE_NS-Agreement_eng.pdf.
216. Alberta Climate Plan, *supra* note 36.
217. This question pertains primarily to the U.S. doctrines of conflict preemption from *American Ins. Ass'n v. Garamendi*, 539 U.S. 396 (2003), dormant foreign affairs preemption from *Zschernig v. Miller*, 389 U.S. 429 (1968), and the dormant foreign Commerce Clause.
218. *Zschernig*, 389 U.S. 429, 441 (1968).
219. Japan Line, Ltd. v. County of Los Angeles, 441 U.S. 434, 446, 452 (1979).
220. Canada's Way Forward, *supra* note 28.
221. *See, e.g.*, Clare Foran, *The Republican Attempt to Derail the Paris Climate Talks*, Atlantic, Dec. 1 2015, http://www.theatlantic.com/politics/archive/2015/12/the-republican-attempt-to-derail-the-paris-climate-talks/418290/.
222. Emily Atkin, *It's Official: None of the Remaining Major GOP Candidates Accept Climate Science*, Climate Progress, Dec. 21, 2015.
223. Coral Davenport & Gardiner Harris, *Citing Urgency, World Leaders Converge on France for Climate Talks*, N.Y. Times, Nov. 30, 2015, http://www.nytimes.com/2015/12/01/world/europe/obama-climate-conference-cop21.html (quoting President Obama as saying, "The United States of America not only recognizes our role in creating this problem, we embrace our responsibility to do something about it.").
224. CPP, *supra* note 9.
225. Timothy Cama, *California, Quebec Want to Expand Carbon Trading System*, The Hill, Sept. 24, 2014, http://thehill.com/policy/energy-

D. Summary

This analysis suggests that there are two primary areas of risk, one present today, the other a potential eventuality in the future. Today, there is a live risk that a court could look at the form and substance of the Linking Agreement and find it constitutionally unsound due to its binding effect on the parties and its effect of increasing the power of California as a state. In the future, changes at the political level in the United States may put the California state program at variance with federal climate policy, rekindling risks around consistency between state action and U.S. foreign policy.

Overall, the Linking Agreement appears to have done a reasonably effective job of striking a balance between having a formal agreement required for market effectiveness and avoiding constitutional constraints on both sides of the border. There are no fail-safe pathways to elimination of all legal risk in this realm, but some room for improvement is discernible. The next section points to two options.

V. Options for Mitigating Legal Risk

There is virtually no limit—*in theory*—to what federal and subnational governments in the United States and Canada could do to reduce the risks identified above. Constitutional amendments are an obvious *theoretical* option. Recent experience in both countries has demonstrated the challenges associated with any legislative action to address climate change,[226] let alone opening up and amending constitutions. Taking a pragmatic view, the Article puts forward two potentially feasible options, one at the federal level and one at the subnational level.

A. Federal-Level Option

At the federal level, the most promising option is for the Administration to put in place an executive agreement between the United States and Canada. Politically, such an agreement would build on current momentum in Canada and the United States. Prime Minister Justin Trudeau's "New Plan for Canada's Environment and Economy" indicates an intention to pursue a North American clean energy and environment agreement that includes "continental coordination of climate mitigation and resilience policies, as well as the appropriate alignment of international negotiation positions."[227] Early indications suggest that Prime Minister Trudeau and President Obama are interested in working together on this front[228] in a way that was never the case under Canada's previous Prime Minister, Stephen Harper.[229] A significant first step together came in March 2016 when Prime Minister Trudeau and President Obama issued the "U.S.-Canada Joint Statement on Climate, Energy, and Arctic Leadership" during Prime Minister Trudeau's visit to Washington, D.C., specifically acknowledging the importance of working together to implement the Paris Agreement.[230]

Legally, such an approach is attractive for several reasons. First, it is something the prime minister and president can execute in relatively straightforward manners. In Canada, the prime minister would be relying on the executive branch's established customary powers in negotiating and concluding international agreements.[231] In the United States, this approach would avoid the continued congressional gridlock on climate change. As a constitutional law scholar has explained, an executive agreement is an agreement between the United States and a foreign country that is effective when signed by the president and the head of the other government. "[If] the document is labeled 'treaty,' Senate approval is required. If the document is titled 'executive agreement,' no Senate ratification is necessary."[232] The latitude afforded by executive agreements is broad and the constitutional basis is strong: "Executive agreements can be used for any purpose; that is, anything that can be done by a treaty can be done by executive agreement. Never in American history has the Supreme Court declared an executive agreement unconstitutional."[233]

Second, an executive agreement would obviate a thread that runs through the fog of several U.S. constitutional constraints. As discussed above, jurisprudence around statutory preemption, dormant foreign affairs preemption, and the dormant Commerce Clause is preoccupied with the consistency (or inconsistency) of state activity with the federal government's foreign policy. An executive agreement that articulates support for subnational carbon market linkages would provide courts a strong indication

environment/218734-california-quebec-want-to-expand-carbon-trading-system.

226. Multiple efforts have failed in Congress. *See* Center for Climate & Energy Solutions, *111th Congress Climate Change Legislation*, http://www.c2es.org/federal/congress/111 (last visited Jan. 06, 2016). In Canada, the last federal government became famous for ending every carbon tax or cap-and-trade conversation by conflating the two and referring to either as "a job-killing tax on everything." *See* Stephen Gordon, *Time for the Conservatives to Let Go of the "Job-Killing Carbon Tax" Talking Point*, Maclean's, Oct. 5, 2012, http://www.macleans.ca/economy/business/time-for-the-conservatives-to-let-go-of-the-job-killing-carbon-tax-talking-point/. For summaries and time lines of Canadian federal government steps, see CESD, *supra* note 29.

227. Liberal Party of Canada, A New Plan for Canada's Environment and Economy 5, *available at* https://www.liberal.ca/files/2015/08/A-new-plan-for-Canadas-environment-and-economy.pdf.

228. *See* Michael Memoli & Christi Parsons, *Canada's Justin Trudeau Replaces Obama as Young, Charismatic Leader on World Stage*, LA Times, Nov. 19, 2015, http://www.latimes.com/nation/politics/la-fg-obama-trudeau-canada-20151119-story.html.

229. Friction was persistent between President Obama and Prime Minister Harper in recent years, most notably due to differing opinions on the Keystone XL pipeline project. *See* Edward Greenspon et al., *How Obama Shocked Harper as Keystone Frustrator-in-Chief*, Bloomberg Bus., Apr. 25, 2014, http://www.bloomberg.com/news/articles/2014-04-24/how-obama-shocked-harper-as-keystone-frustrator-in-chief.

230. Press Release, White House, U.S.-Canada Joint Statement on Climate, Energy, and Arctic Leadership (Mar. 10, 2016).

231. *See* Barnett, *supra* note 160. Most indications suggest Prime Minister Trudeau is moving quickly on the climate front, having committed to reaching a pan-Canadian framework within 90 days of the Paris Agreement. *See* Liberal Party of Canada, *supra* note 227.
See Memoli & Parsons, *supra* note 228.

232. Chemerinsky, *supra* note 114, at 368-69. *See also* Michael John Garcia, Cong. Research Serv., International Law and Agreements: Their Effect Upon U.S. Law (2015), *available at* https://fas.org/sgp/crs/misc/RL32528.pdf.

233. Chemerinsky, *supra* note 114, at 368-69.

that the executive views these initiatives as constitutionally fair and consistent with the nations' foreign bargaining power[234] and ability to speak with one voice.[235] Indeed, the existence of an executive agreement was a key factor in the Supreme Court's *Garamendi* decision, where, for the Court, the agreement evidenced U.S. foreign policy and demonstrated whether state law was unconstitutional.[236] Such an executive agreement would not change a court's look at relevant dimensions of congressional intent (because Congress would not be involved), so some degree of legal risk would remain unaddressed.

Third and finally, the executive agreement could generate clarity for states and provinces. While President Obama's Climate Action Plan[237] and CPP, along with support for the new Paris Agreement, suggest a view that is consistent with significant state action on GHG emission reductions, there may still be room for a court to find inconsistency. For example, CARB has indicated that some changes are needed to the state cap-and-trade regime, including linkage dimensions, in order to be consistent with the CPP.[238] An executive agreement could clarify that state and provincial action, including cross-border trading, is consistent with federal law and policy, while identifying any applicable parameters (though such detail may be done in a separate federal-state dialogue as part of CPP implementation in the United States and a separate federal-provincial-territorial dialogue as part of implementing the Paris Agreement and forthcoming pan-Canadian Plan).

There is flexibility in determining the precise form and content of such an executive agreement. For example, attention to subnational carbon markets may be embedded in a broader energy and environment agreement. Whatever the case, to achieve the above benefits, governments would need to include clear statements that demonstrate for courts that both federal governments consider subnational cross-border carbon market linkages to be part of the solution and not problematic.

It should be noted that the executive agreement option does not satisfy all constitutional concerns raised in this area. Moreover, it is conceivable that the next U.S. president would withdraw from any Canada-United States agreement and rescind the executive agreement; Canada's prime minister could theoretically do the same. This reality underscores the importance of ongoing constitutional diligence by states and provinces. However, similar to the rationale behind the linkages themselves, such an executive agreement could create time, space, and momentum that would allow markets and linkages to operate, mature, and improve.

234. "Bargaining chips" was a core concern and concept in *Crosby v. NFTC*, 530 U.S. 363 (2000).

235. Ability to speak with one voice was a core concern in *Japan Line, Ltd. v. County of Los Angeles*, 441 U.S. 434, 446, 452 (1979).

236. American Ins. Ass'n v. Garamendi, 539 U.S. 396 (2003).

237. Exec. Office of the President, The President's Climate Action Plan (2013), *available at* https://www.whitehouse.gov/sites/default/files/image/president27sclimateactionplan.pdf.

238. CARB, *supra* note 210.

B. Subnational-Level Option

At the state/provincial level, California and Quebec need to continue striking the difficult balance of staying clear of constitutional constraints while maintaining a stable carbon market linkage that has integrity over the long term. This is no small challenge given the paradox that actions to make the linkage more stalwart and binding (that is, making it even more like a binding treaty) would quickly put the agreement at odds with the jurisprudence on both sides of the border.[239] To date, this has largely been achieved by taking the approach of enacting reciprocal legislation and regulations. However, as Quebec and California "continue to examine their respective regulation . . . in order to promote continued harmonization and integration,"[240] and as the Canadian provinces of Ontario and Manitoba take steps to join,[241] one option to seriously consider is clarifying how the agreement relates to other emissions-trading regimes. This is particularly important given the likelihood of more state programs materializing under the CPP and other subnational initiatives abroad as part of the Paris Agreement and implementation of INDCs.

While the Linking Agreement contemplates additional parties "that are harmonized with each of the Parties' programs,"[242] it does not discuss whether Quebec or California themselves could link with other carbon markets in separate jurisdictions. For example, what would happen if Quebec wants to join the RGGI? Is that prohibited in the current system? What if Quebec supports Ontario and Manitoba joining,[243] but California does not? In the absence of clarity on this dimension, a court may interpret silence in the Agreement as a form of monogamy between Quebec and California that does indeed affect sovereign rights and wades into the exclusive constitutional authority of federal governments.

Notwithstanding the paradox of market stability created by a clear and binding linkage agreement versus constitutional constraints, it is feasible to at least partly manage this specific issue. Quebec and California, perhaps as part of their preparation for Ontario's joining, could amend the Linkage Agreement to include a new article that, in the spirit of the current version, requires the parties to come together if one party wants to link outside of the current agreement. The new article could set out basic parameters around such a scenario, including anything from a requirement to de-link before joining another linkage to a process

239. In Canada, this would offend rules set out in *Bazylo v. Collins*, [1984] C.A. 268 (Can. Que. C.A.), and *A-G Ontario v. Scott*, [1955] S.C.R. 137 (Can.). In the United States, this could be offside of the Compact Clause and the dormant foreign affairs preemption doctrine, as expressed in *Zschernig v. Miller*, 389 U.S. 429 (1968).

240. Linking Agreement, *supra* note 83, at art. 4.

241. Ontario, for example, has begun regulatory amendments to start aligning with Quebec and California. *See* Marie-Claude Bellemare & Adam Chamberlain, *Ontario Moves to Prepare for Cap and Trade System for Greenhouse Gas Emissions*, Borden Ladner Gervais LLP blog, Sept. 16, 2015, http://www.blg.com/en/newsandpublications/publication_4240.

242. Linking Agreement, *supra* note 83, at art. 17.

243. Recall that these three provinces signed an MOU in December 2015, but California, for reasons that remain unclear, did not sign on.

for ensuring harmony and integrity across the three-way relationship (for example, to avoid the risk of double-counting or large swings in carbon prices).

If such a substantive amendment or any others are pursued, it is worth pointing out here that Quebec and California should also take steps to reconcile the existing tension between the Agreement text that indicates that it does not restrict each party's sovereign right to change or repeal their respective programs, and the provisions that quite clearly impose constraints in the same space, most notably the Withdrawal Procedure in Article 16 and the termination provision in Article 20 (both of which state that a party is bound to remain in the Agreement for 12 months after deciding it wants to withdraw).

VI. Conclusion

As the bottom-up approach unfolds under the Paris Agreement, linkages between carbon markets are likely to expand. North America is an example of this, as Ontario and Manitoba take steps toward linking with California and Quebec. As discussed in this Article, however, linking subnational carbon markets is not a straightforward exercise. Legal constraints inhibit how linkages may be structured, leaving some options off the table that might otherwise provide optimum market stability. Further, political changes at the federal level in the United States could rekindle aspects of constitutional constraints on cross-border emissions trading.

This experience leads to two overarching conclusions. First, even in the case of two subnational jurisdictions that have relatively similar legal regimes and political structures, linking is not simple. The Quebec-California linkage demonstrates that carbon markets do not tidily lock together like Lego pieces. Much effort, time, cooperation, and trust is required to get to the point of actual linking and implementing. Consider the years of work under the WCI that were necessary to set up the linkage. Moreover, any linkages in North America will continue to brush up against or offend constitutional constraints on both sides of the border, even once in operation. Given these challenges between two similar jurisdictions, it may be overly ambitious to envision spreading subnational linkages across more international borders to include jurisdictions in countries like China or Brazil. Such ambitious attempts would push limits and test legal constraints on carbon markets, potentially affecting the fundamental success of carbon markets overall. Experiences in the European Union's emissions trading regime suggest there is good reason to proceed with caution.[244]

Second, there is a message here for the Paris Agreement implementation world: The bottom-up approach will not be smooth or easy. While taking a bottom-up approach created a path to international agreement, it has arguably shifted difficult decisions into the future and to national and subnational levels, resulting in many moving parts. The California-Quebec linkage offers reason for optimism and pessimism at the same time. On the positive side, the linkage has actually become a reality and is functioning reasonably well so far. On the negative side, however, it took a significant amount of effort to get to this point and a degree of legal risk remains. It is hard to see carbon markets worldwide proliferating and thriving if this much effort and risk is woven throughout. One might argue that the process will become increasingly straightforward as lessons are applied and markets mature; however, to date, there is minimal empirical basis for such a notion. Further research will be needed in years to come. For the sake of the planet and future generations, let us hope that subnational linkages do in fact provide empirical evidence of success over the long term, constitutional constraints and all.

244. The European Union emissions trading scheme experienced challenges (most notably a significant drop in carbon price) due to design challenges and broader economic turbulence. *See, e.g.*, Robert Stavins, *Low Prices a Problem? Making Sense of Misleading Talk About Cap-and-Trade in Europe and the USA*, Robert Stavins Blog, Apr. 25, 2012, http://www.robertstavins-blog.org/2012/04/25/low-prices-a-problem-making-sense-of-misleading-talk-about-cap-and-trade-in-europe-and-the-usa/.