Linking Across Borders: Opportunities and Obstacles for a Joint Regional Greenhouse Gas Initiative-Western Climate Initiative Market

Augusta Wilson*

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* Staff Attorney, Climate Science Legal Defense Fund. The following Article was written while the author was an Energy Law Fellow at the New York University School of Law Frank J. Guarini Center on Environmental, Energy, and Land Use Law. The author wishes to thank members of the Program Staff at the California Air Resources Board, Dale Beugin of EcoResources, Luke Wisniewski of the Maryland Department of Environmental Protection, William Lamkin of the Massachusetts Department of Environmental Protection, Christopher Barrington-Leigh of McGill University, Dallas Burtraw and Clayton Munnings of Resources for the Future, and Daniel Esty of Yale Law School for providing invaluable insight for this article. Special thanks to David Golove, Danielle Spiegel-Feld, and Katrina Wyman of New York University School of Law for their thoughtful comments and feedback.

I. INTRODUCTION

Despite the strong consensus in the scientific community that anthropogenic climate change requires urgent attention,[1] neither the United States nor Canada has implemented a comprehensive national policy to reduce greenhouse gas emissions. Into this void have stepped two regional cap-and-trade programs that regulate greenhouse gas emissions in parts of both countries. One, the Regional Greenhouse Gas Initiative ("RGGI"), is a partnership of nine states in the northeastern and mid-Atlantic U.S.[2] The other, the Western Climate Initiative (the "WCI"), is a partnership between California and the Provinces of Québec and Ontario.[3] Both programs have been operating for several years, demonstrating that cap-and-trade programs can achieve cost-effective emissions reductions.[4] Nonetheless, both markets have faced difficulties at various points, including volatility of allowance prices[5] and the withdrawal of partner jurisdictions.[6]

One often-cited mechanism for improving the functioning of cap-and-trade markets is to link them with other markets. In this context, linking is defined as the parties of two or more cap-and-trade programs each agreeing to recognize each other's allowances for purposes of demonstrating compliance by a regulated source.[7] Political leaders in both RGGI and WCI jurisdictions have

1. INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2014: A SYNTHESIS REPORT 47 (Core Writing Team et al. eds., 2015) (explaining that evidence for human influence on the climate system has only grown since the last assessment report).

2. *Welcome*, REGIONAL GREENHOUSE GAS INITIATIVE, https://www.rggi.org/ [https://perma.cc/6GL2-2TRT] (last visited Jan. 12, 2018).

3. WESTERN CLIMATE INIATIVE, INC., http://www.wci-inc.org/ [https://perma.cc/8PER-VJUV] (last visited March 2, 2018).

4. *See* Michael Hiltzik, *Emissions Cap-and-Trade Program Is Working Well in California*, L.A. TIMES (June 12, 2015, 8:45 PM), http://www.latimes.com/business/hiltzik/la-fi-hiltzik-20150613-column.html [https://perma.cc/KL3T-TJYL].

5. *See, e.g.*, Billy Pizer et al., *How to Manage Carbon Prices—Lessons from the Northeast*, THE HILL (Nov. 6, 2014, 6:00 AM), http://thehill.com/blogs/pundits-blog/energy-environment/223130-how-to-manage-carbon-prices-lessons-from-the-northeast [https://perma.cc/EKB9-QCTH] (explaining that RGGI has experienced both falling allowance prices, triggering its auction reserve price, and rising prices, triggering it cost containment reserve price).

6. *See, e.g.*, Sindya N. Bhanoo, *Arizona Quits Western Cap-and-Trade Program*, N.Y. TIMES (Feb. 11, 2010), http://www.nytimes.com/2010/02/12/science/earth/12climate.html [https://perma.cc/XE25-VL7F].

7. Daniel M. Bodansky et al., *Facilitating Linkage of Heterogeneous Regional, National, and Sub-National Climate Policies through a Future International Agreement* 2 (Harvard Kennedy Sch. Faculty Research Working Paper Series, Working Paper No. RWP14-056, 2014).

repeatedly called for such a linkage between the two programs. In 2006, then-Governors George Pataki of New York and Arnold Schwarzenegger of California announced that they would pursue a partnership between RGGI and the WCI.[8] In 2015, New York Governor Andrew Cuomo issued another public call for the parties to explore a formal linkage between the two markets.[9] Nonetheless, the parties have so far made little progress towards that end.

The idea of a RGGI-WCI linkage has taken on a new exigency in recent months, primarily because of the rapid shifts in federal climate change policy following the 2016 U.S. Presidential election.[10] As the federal government rolls back climate regulations, subnational carbon markets such as RGGI and the WCI

8. *See generally* Karen Matthews, *Schwarzenegger Pushes Emission Markets*, WASH. POST (Oct. 17, 2006, 1:41 AM), http://www.washingtonpost.com/wp-dyn/content/article/2006/10/16/AR2006101600165.html [https://perma.cc/6Q6D-WN36]. Governor Schwarzenegger also signed an executive order calling for the creation of a program that would allow the WCI to link with RGGI. Cal. Exec. Order No. S-20-06 (Oct. 18, 2006), https://www.gov.ca.gov/news.php?id=4484 [https://perma.cc/4RS5-9VG6].

9. Press Release, Office of Governor Andrew Cuomo, Governor Cuomo, Joined By Vice President Gore, Announces New Actions to Reduce Greenhouse Gas Emissions and Lead Nation on Climate Change (Oct. 8, 2015), https://www.governor.ny.gov/news/governor-cuomo-joined-vice-president-gore-announces-new-actions-reduce-greenhouse-gas-emissions [https://perma.cc/U9WZ-9T5E].

10. The Obama Administration made it clear that climate change mitigation was a priority. In the summer of 2015, it unveiled the Clean Power Plan, *see* Press Release, Office of the Press Sec'y: The White House, Fact Sheet: President Obama to Announce Historic Carbon Pollution Standards for Power Plants (Aug. 3, 2015), https://obamawhitehouse.archives.gov/the-press-office/2015/08/03/fact-sheet-president-obama-announce-historic-carbon-pollution-standards [https://perma.cc/SN62-4H96], and in the fall of 2016 the U.S. ratified the Paris Agreement on climate change, in which countries around the world made binding commitments to hold global warming to no more than two degrees above pre-industrial levels. *See* U.N. FRAMEWORK CONVENTION ON CLIMATE CHANGE, *Paris Agreement—Status of Ratification*, http://unfccc.int/paris_agreement/items/9444.php [https://perma.cc/AV3S-D7P3] (last visited Oct. 9, 2017). In early 2016, however, the U.S. Supreme Court stayed implementation of the Clean Power Plan, West Virginia v. EPA, 136 S.Ct. 1000 (2016) (mem), and when President Trump took office in 2017, he issued an Executive Order directing the Environmental Protection Agency to review it. *See* Review of the Clean Power Plan, 82 Fed. Reg. 16,329 (proposed Apr. 4, 2017) (to be codified at 40 C.F.R. pt. 60). President Trump has also announced that he plans to withdraw the U.S. from the Paris Agreement, Remarks Announcing United States Withdrawal From the United Nations Framework Convention on Climate Change Paris Agreement, 2017 DAILY COMP. PRESS. DOC 373 (June 1, 2017), although the Administration's position on this issue appears to be somewhat in flux. *See* Emre Perker, *Trump Administration Seeks to Avoid Withdrawal from Paris Climate Accord,* WALL ST. J. (Sept. 17, 2017, 5:16 PM), https://www.wsj.com/articles/trump-administration-wont-withdraw-from-paris-climate-deal-1505593922 [https://perma.cc/ES2D-PNH4].

will need to take on an increasingly central role in mitigating U.S. greenhouse gas emissions, and they may face pressure from environmental advocates to reduce emissions even further than they already have.[11] Successful linkage could help them meet this challenge.

While linkage could offer benefits both to RGGI and to the WCI, in order to realize those benefits the two jurisdictions would need to harmonize their cap-and-trade programs in various respects, and the new joint market would need to achieve a certain level of stability. However, the more closely the two programs coordinate with each other to achieve the necessary harmonization, and the more binding—and therefore stable—the linking agreement, the more significant the risk that the agreement would be vulnerable to challenge in U.S. courts under various constitutional doctrines, particularly the dormant foreign affairs power and the dormant foreign commerce clause. This Article examines this tension, evaluates how serious an obstacle it would pose to a potential RGGI-WCI linkage, and seeks to offer solutions that would allow policymakers to develop a linkage that provided the desired benefits, while avoiding constitutional pitfalls.

This Article also examines what aspects of the WCI and RGGI programs would be most important to align in order to create a successful joint market that meets both jurisdictions' policy goals. While the existing linkage of the California and Québec carbon markets under the auspices of the WCI may, to some degree, provide a useful roadmap, a RGGI-WCI linkage would likely pose some new challenges that California and Québec did not face when linking their markets. In particular, while Québec and California developed their carbon markets with integration in mind, RGGI and the WCI developed independently. As a result, there are some significant differences between the two programs that the parties would need to address.

This Article begins, in Part II, by reviewing the arguments in favor of linking RGGI and the WCI. Then, in Part III, it draws on interviews with field and academic experts, as well as a review of the

11. Indeed, as part of RGGI's ongoing 2016 Program Review, numerous environmental organizations filed comments urging RGGI to adopt a substantially more ambitious cap. *See, e.g.*, Letter from 1199SEIU United Healthcare Workers East—Md./DC Div. et al., to Andrew McKeon, Exec. Dir., RGGI, Inc. and RGGI Bd. (July 11, 2017); Letter from Acadia Ctr. et al., to Andrew J. McKeon, Exec. Dir., RGGI, Inc. (Aug. 2, 2017).

relevant literature, to determine the elements of the California and Québec markets that were most important to harmonize for those markets to link effectively. Part IV identifies key differences between RGGI and the WCI, and identifies challenges to linkage that policymakers would need to overcome in order to create a successful joint market. Finally, in Parts V and VI, the Article assesses the constitutional challenges such a linkage may face, and proposes strategies for insulating the linked market from such claims.

Ultimately, while opponents of linkage could raise colorable constitutional claims, there are convincing arguments in favor of the constitutionality of such a linking agreement, and it should be possible to design one that avoids potential legal pitfalls and reduces the risk of a constitutional challenge to acceptable levels. Notably, while other scholars have examined the economic theories supporting linkage, as well as the legal issues raised by linkages that cross international borders,[12] this Article appears to be the first to combine a literature review with a series of field interviews. This research offers a new type of pragmatic guide for policymakers considering a linkage.

II. The Benefits of Linkage

"Cap-and-trade" is a market-based approach to reducing greenhouse gas ("GHG") emissions. Under a cap-and-trade regime, the government decides which facilities or economic sectors will be covered by the program, and then sets an emissions "cap" that represents the total allowed emissions from all covered sources of GHGs.[13] Tradeable emissions allowances, each authorizing the release of a specified amount of GHGs with their total equaling the overall emissions cap, are then distributed to covered sources.[14] At the end of each compliance period, covered entities must submit allowances representing the amount of their actual GHG emissions during the period.[15] Because different

12. *See, e.g.*, Juliet Howland, Comment, *Not All Carbon Credits Are Created Equal: The Constitution and the Cost of Regional Cap-and-Trade Market Linkage*, 27 U.C.L.A. J. ENVTL. L. & POL'Y 413, 425 (2009).

13. PEW CTR. ON GLOB. CLIMATE CHANGE, CLIMATE CHANGE 101: CAP AND TRADE 1 (2011).

14. *Id.*

15. *Id.*

covered entities face different costs for reducing their emissions, trading of allowances incentivizes the regulated entities that can accomplish the desired emissions reductions at the lowest cost to do so, while incentivizing the entities for whom reductions are more expensive to instead buy allowances.[16]

In recent years, many jurisdictions around the world that participate in carbon cap-and-trade programs have expressed interest in linking them in various ways.[17] This interest demonstrates a revealed preference for linkage, and indicates that many jurisdictions expect it to yield net benefits. Although, to be sure, many of these linkages have taken somewhat different forms from the one proposed here,[18] and not all have come to fruition, it is safe to say there is a general trend towards linkage, likely reflecting arguments developed by theorists that linkage can provide a range of economic, political and administrative advantages. This section briefly reviews these asserted benefits.

A. Economic Benefits of Linkage

One benefit of linkage often cited in the literature is that it can reduce the overall cost of achieving desired emissions reductions.[19] This is largely because different jurisdictions will have different marginal costs of abating carbon pollution, depending on the mix of electricity generation technologies they employ, and (to the extent the cap-and-trade program covers sectors of the economy

16. *Id.*

17. Matthew Ranson & Robert N. Stavins, *Linkage of Greenhouse Gas Emissions Trading Systems: Learning from Experience*, 16 CLIMATE POL'Y 284, 286 (2016).

18. For example, some have been unilateral, with only one jurisdiction recognizing allowances from a new jurisdiction, as opposed to the bilateral linkage proposed here, whereby RGGI and the WCI would each agree to recognize the other's allowances for compliance purposes. *See id.* at 287, tbl. 1. Similarly, a more limited kind of linkage has developed whereby countries recognize offsets from joint offset programs, such as the Clean Development Mechanism. *See* P'SHIP FOR MKT. READINESS, OVERVIEW OF CARBON OFFSET PROGRAMS: SIMILARITIES AND DIFFERENCES 2 (2015).

19. *See, e.g.*, Brian C. Murray et al., *Design Issues for Linking Carbon Markets*, *in* CLIMATE CHANGE POLICY IN NORTH AMERICA: DESIGNING INTEGRATION IN A REGIONAL SYSTEM 246, 250 (Neil Craik et al. eds., 2013); MKT. ADVISORY COMM. TO THE CAL. AIR RES. BD., RECOMMENDATIONS FOR DESIGNING A GREENHOUSE GAS CAP-AND-TRADE SYSTEM FOR CALIFORNIA 72 (2007); Dmitry Fedosov, *Linking Carbon Markets: Development and Implications*, 10 CARBON & CLIMATE L. REV. 202, 204 (2016); David V. Wright, *Cross-Border Constraints on Climate Change Agreements: Legal Risks in the California-Quebec Cap-and-Trade Linkage*, 46 ENVTL. L. REP. NEWS & ANALYSIS 10478, 10484 (2016).

beyond the electricity sector) their specific economies.[20] Linking markets allows an equalization of these costs. The jurisdiction with the higher marginal cost of abatement benefits because sources there can purchase relatively low-cost reductions from the other jurisdiction, allowing it to achieve its emissions reduction goals at a lower cost.[21] Conversely, the jurisdiction with the lower marginal cost of abatement is able to sell its allowances at higher prices, resulting in an inflow of revenue, while implementing emissions reductions at a lower cost than the price of the permits they sell.[22] Notably, the greater the pre-linkage difference in the price of allowances between the two jurisdictions, the more significant this benefit will tend to be.[23]

A related, but distinct, economic argument for linking carbon markets is that it can improve market efficiency by increasing liquidity.[24] By increasing the number of regulated sources participating in the market, linking makes it easier for participants to trade allowances on the market quickly and at desirable prices, lowering transaction costs.[25] This effect can be particularly strong

20. For example, Québec's electricity sector is dominated by (fossil fuel-free) hydropower, making abatement costs there relatively high, whereas California, by comparison, has many low-cost abatement options. This means that, all else being equal, actual emissions abatement is more likely to occur in California, with Québec being a net buyer of permits. Jason Dion, *Unpacking the WCI: Thinking Linking*, CAN.'S ECOFISCAL COMMISSION (June 29, 2016), https://ecofiscal.ca/2016/06/29/unpacking-wci-thinking-linking/ [https://perma.cc/S8VV-95Y4]. California saw the potential in-flow of revenue as a benefit of linking, and, while the potential for net outflow of revenue caused some concern in Québec, it was ultimately outweighed by the appeal of lower private sector compliance costs. *Id.*

21. *See, e.g.*, CAN.'S ECOFISCAL COMM'N, THE WAY FORWARD: A PRACTICAL APPROACH TO REDUCING CANADA'S GREENHOUSE GAS EMISSIONS 30 (2015); Ranson & Stavins, *supra* note 17, at 288; Wright, *supra* note 19, at 10483–84.

22. Ranson & Stavins, *supra* note 17, at 289; *see also* CAN.'S ECOFISCAL COMM'N, *supra* note 21, at 30.

23. Christian Flachsland et al., *To Link or Not to Link: Benefits and Disadvantages of Linking Cap-and-Trade Systems*, 9 CLIMATE POL'Y 358, 360 (2009).

24. "'Liquidity' in the sense of 'trading liquidty' reflects the ability to transact quickly without exerting a material effect on prices.'" Howland, *supra* note 12, at 425 (quoting Kevin Warsh, Fed. Reserve Bd. of Governors, Speech at the Institute of International Bankers Annual Washington Conference: Market Liquidity: Definitions and Implications (March 5, 2007)).

25. *See* Judson Jaffe & Robert Stavins, INT'L EMISSIONS TRADING ASS'N, IETA REPORT ON LINKING GHG EMISSIONS TRADING SYSTEMS 17 (2007) [hereinafter IETA]. Multiple field experts echoed the view that improved market liquidity is a significant benefit of linkage. Telephone Interview with Program Staff of Cal. Air Res. Bd. (Apr. 3, 2017); Telephone Interview with Luke Wisniewski, Chief**,** Md. Dep't of Envtl. Prot. (May 25, 2017).

if one or both of the linking markets are small.[26] The greater number of market participants and available portfolio of options for reducing emissions can also reduce price volatility by helping to "buffer carbon markets against uncertainties that affect costs, such as patterns of economic activity and weather."[27] As with improved liquidity, this effect can also be particularly important if one of the linking markets is relatively small.[28]

While RGGI and the WCI should certainly be able to realize these economic benefits from the proposed linkage, it is important not to gloss over the potential negative effects linkage can have that both jurisdictions would need to consider. Crucially, the benefits described above are likely to be unevenly distributed among, and even within, participating jurisdictions. Depending on the quantity and distribution of low-cost abatement opportunities, covered sources in the jurisdiction with the lower marginal cost of abatement may well experience increased costs.[29] Conversely, the jurisdiction with the higher marginal cost of abatement will tend to experience a decrease in the cost of compliance, and thus a trend towards emissions staying within the jurisdiction while covered sources buy the cheaper allowances now available from the lower-cost jurisdiction. If such an "outsourcing" of emissions abatement occurs, the higher marginal cost jurisdiction will tend to lose many of the ancillary benefits associated with emissions reduction: reduced local air pollution, increased energy security, and economic stimulus from low-carbon investments, for example.[30]

These potential negative economic effects of linkage are important to consider, and could certainly be expected to add to the challenge of achieving political acceptance for the proposed linkage. Nonetheless, analyses generally find that linking provides overall economic benefits for the linked market,[31] and that indeed

26. IETA, *supra* note 25, at 17.

27. Dallas Burtraw et al., *Linking by Degrees: Incremental Alignment of Cap-and-Trade Markets* 2 (Res. for the Future, Discussion Paper No. 13–04, 2013); *see also* Ranson & Stavins, *supra* note 17, at 289 ("In principle, by increasing and diversifying the number of buyers and sellers in a carbon market, linkage can provide the dual benefits of increased liquidity and reduced price volatility.").

28. IETA, *supra* note 25, at 17.

29. *See, e.g.*, CAN.'S ECOFISCAL COMM'N, *supra* note 21, at 30.

30. Flachsland et al., *supra* note 23, at 361–62.

31. S*ee, e.g.*, CAN.'S ECOFISCAL COMM'N , *supra* note 21, at 30.

it is possible for both participating jurisdictions to experience at least moderate economic gains.[32]

B. Administrative Benefits of Linkage

In addition to economic efficiencies, linkage can also offer administrative benefits. It can create opportunities (or make them easier to take advantage of) for regulators in the linked jurisdictions "to share best practices" with one another.[33] For example, it may encourage sharing of improved procedures for measuring, verifying, and reporting emissions, or for tracking allowances.[34] The alignment in administration and design that linking requires may also have the benefit of streamlining compliance costs and reducing administrative burdens for businesses in both jurisdictions.[35] Relatedly, linkage may provide increased regulatory consistency and stability for affected sources simply because it is more difficult to change a regulatory scheme when changes require a level of coordination with linked jurisdictions.[36] While the degree of coordination required to successfully link markets also undoubtedly imposes some administrative burdens, if done well, the administrative benefits of linkage seem likely to outweigh the costs.

C. Political Benefits of Linkage

Linkage may also be appealing for political reasons, and indeed at least one commentator has argued that in some cases politics may be the realm in which linkage can offer the most significant benefits.[37] Any GHG emissions reduction policy pursued in

32. *Id.*; *see also* CAL. AIR RES. BD., PROPOSED LINKAGE OF CALIFORNIA'S CAP-AND-TRADE PROGRAM WITH THE CANADIAN PROVINCE OF QUÉBEC'S CAP-AND-TRADE PROGRAM 12 (2013) (explaining that the Air Resources Board expected the linkage to have no effect or only a slight effect on allowance prices in California, and to result in "a small increase in revenues."). Notably, the economic effect may have been bigger in Quebec, where "permits were estimated to cost Québec emitters 21–57% less than they would have in a Québec-only system." Dion, *supra* note 20.

33. Burtraw et al., *supra* note 27, at 2–3.

34. *Id.*

35. *Id.* at 3.

36. Bodansky et al., *supra* note 7, at 6.

37. Flachsland et al., *supra* note 23, at 366.

isolation by a single state, even one as large as California,[38] "has limited potential unless it contributes to a global effort to address the global problem of climate change."[39] A lone regional economy undertaking "unilateral GHG disarmament" risks suffering negative economic effects without having much impact on the global climate change problem.[40] Linking carbon markets may therefore be beneficial, not only because it allows those markets to function more effectively, but also because it demonstrates cooperation and mutual trust, and builds momentum for other jurisdictions to make their own commitments to climate change mitigation efforts.[41]

A linkage between RGGI and the WCI could indeed send a strong political message. New York and California collectively represented more than 20% of the United States' gross domestic product ("GDP") in 2015.[42] Québec contributed almost 20% of Canada's GDP in 2015, and Ontario contributed almost 40%, together representing over half of Canada's GDP.[43] For all of these jurisdictions to participate in a joint carbon market would send a powerful signal to the federal governments of both countries, as well as other countries around the world, that the political will exists in large parts of the U.S. and Canada to reduce GHG emissions and combat climate change.

38. Douglas A. Kysar & Bernadette A. Meyler, *Like a Nation State*, 55 UCLA L. REV. 1621, 1623 (2008) (pointing out that "no one in California is under the illusion that the state can address global climate change adequately on its own," and that California's climate change strategy explicitly depends on its ability to convince other states and other nations to adopt its policies in order "to avoid a potentially ruinous unilateral GHG disarmament").

39. Burtraw et al., *supra* note 27, at 1.

40. Kysar & Meyler, *supra* note 38, at 1623.

41. *See, e.g.*, Burtraw et al., *supra* note 27, at 2; Ranson & Stavins, *supra* note 17, at 290; Bodansky et al., *supra* note 7, at 6; *see also* Richard B. Stewart, *States and Cities as Actors in Global Climate Change Regulation: Unitary vs. Plural Architectures*, 50 ARIZ. L. REV. 681, 685–86 (2008) (arguing that state climate change initiatives such as RGGI "have made it appreciably more likely that Congress will enact climate regulation," which would in turn promote U.S. participation in international climate negotiations).

42. Matthew Speiser, *This Chart Shows How Much Each State Contributes to the US Economy*, BUS. INSIDER (Sept. 3, 2015, 9:11 AM), http://www.businessinsider.com/how-much-each-state-contributes-to-the-us-economy-2015-9 [https://perma.cc/S38T-RDUB].

43. Statistics Canada, *Gross Domestic Product, Expenditure-Based, by Province and Territory*, GOV'T. CAN., http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/econ15-eng.htm [https://perma.cc/PP93-8P83] (last modified Nov. 9, 2016).

III. EFFECTUATING THE CALIFORNIA-QUÉBEC LINK: PREREQUISITES FOR SUCCESSFUL MARKET INTEGRATION

In order to ensure that the linked system functioned properly, and that it met the policy objectives of both the RGGI and the WCI participants, it would be essential to harmonize some design features of the two programs prior to linkage. Given that California, Québec, and Ontario have already successfully linked cap-and-trade markets across an international border, it is instructive to examine the process those two jurisdictions went through in creating a linkage, and what elements were most crucial to harmonize in order to ensure the effectiveness of the linked system.

The WCI came into being in 2007 when the governors of Arizona, California, New Mexico, Oregon, and Washington signed an agreement to cooperate to reduce GHG emissions, with a cap-and-trade program as its centerpiece.[44] By the middle of 2008, Utah and Montana, as well as the Canadian provinces of British Columbia, Manitoba, Ontario, and Québec had joined the WCI as partners.[45] Fourteen additional subnational jurisdictions in the U.S., Canada, and Mexico joined as observers.[46]

The WCI cap-and-trade program was designed to be a decentralized composite of the cap-and-trade programs of its participating members, implemented through the members' state or provincial regulations.[47] Unfortunately, because of economic pressures resulting from the financial crisis, as well as changes in occupancy of member states' Governors' mansions,[48] the political fortunes of cap-and-trade shifted. Most of the original partner

44. *See* Sonja Klinsky, *Bottom-up Policy Lessons Emerging from the Western Climate Initiative's Development Challenges*, 13 CLIMATE POL'Y 143, 145, 149 (2013).

45. *Id.* at 149.

46. Nancy Shurtz, *Carbon Pricing Initiatives in Western North America: Blueprint for Global Climate Change* Policy, 7 SAN DIEGO J. CLIMATE & ENERGY L. 61, 104 (2015–2016). In addition, a total of "16 jurisdictions have had observer status." Klinksy, *supra* note 44, at 145.

47. WESTERN CLIMATE INITIATIVE, DESIGN FOR THE WCI REGIONAL PROGRAM 6 fig.2 (2010).

48. The relevant changes involved the replacement of governors who were supportive of cap-and-trade with governors who were actively opposed to it. For example, Janet Napolitano (D-AZ) was replaced by Jan Brewer (R-AZ), Jon Huntsman (R-UT) was replaced by Gary Herbert (R-UT), and Bill Richardson (D-NM) was replaced by Susanna Martinez (R-NM). *See* Klinsky, *supra* note 44, at 156 (discussing the shift in party affiliation of governors of WCI states between 2007 and 2011, and pointing out the correlation between party affiliation and concern about the effects of climate change).

states failed to pass the necessary enabling legislation or regulations.[49] Of the eleven partners the WCI had at its peak, only California, New Mexico, British Columbia, Ontario, and Québec passed such enabling legislation, and New Mexico began the process of reversing its legislation a few years later in 2011.[50] Ultimately, only California, Québec, and Ontario have developed working cap-and-trade markets, and they are the only members that have formally linked their markets.[51]

California and Québec developed their carbon markets collaboratively[52] and went to great lengths to harmonize the aspects of the two programs where they believed alignment was most essential for linkage.[53] Harmonizing basic procedures for handling compliance instruments was crucial. Ensuring that both programs had valid and transparent procedures for issuing emissions allowances, for monitoring trading of those allowances among participants in the two programs, and for verifying the actual emissions those instruments represent, was a first priority in order to ensure that the market could function smoothly following

49. *See* Cally Carswell, *Western Climate Initiative Moves Forward, Smaller than Imagined*, HIGH COUNTRY NEWS (Dec. 5, 2010), http://www.hcn.org/issues/42.21/western-climate-initiative-moves-forward-smaller-than-imagined [https://perma.cc/7T47-G25W].

50. Klinsky, *supra* note 44, at 147.

51. California and Québec formally linked their markets on January 1, 2014. *See* Press Release, Cal. Air Res. Bd., California and Quebec Announce First Joint Cap-and-Trade Auction (Sept. 18, 2014), https://www.arb.ca.gov/newsrel/newsrelease.php?id=657 [https://perma.cc/A52V-CCUW]. As Ontario's official participation in the WCI is only a few months old, this Article will focus on the process California and Québec went through in linking their markets.

52. *See generally* CAL. AIR RES. BD., LINKAGE READINESS REPORT 4 (2013); Richard G. Newell et al., *Carbon Markets: Past, Present, and Future*, 6 ANN. REV. RESOURCE ECON. 191, 199 (2014). The two jurisdictions entered into a formal Agreement Concerning the Harmonization and Integration of Cap-and-Trade Programs for Reducing Greenhouse Gas Emissions in September 2013. Agreement between the California Air Resource Board and the Gouvernement du Québec Concerning the Harmonization and Integration of Cap-and-Trade Programs for Reducing Greenhouse Gas Emissions, Sept. 27, 2013, available at https://www.arb.ca.gov/cc/capandtrade/linkage/ca_quebec_linking_agreement_english.pdf [https://perma.cc/U9FL-WUGQ].

53. CAL. AIR RES. BD., *supra* note 52, at 9–10; *see also* Que. Office of the Ministry of Sustainable Dev., Env't and the Fight Against Climate Change, *Quebec Cap-and-Trade System: Pioneering the Linking of a Regional Carbon Market*, *in* EMISSIONS TRADING WORLDWIDE: INTERNATIONAL CARBON ACTION PARTNERSHIP STATUS REPORT 10, 10 (Camille Serre et al. eds., 2015).

linkage.[54] If the markets were poorly aligned in this respect, linkage could compromise the effectiveness and environmental integrity of the program that had better procedures in place prior to linkage, leading to political backlash. To avoid this problem, Québec and California collaborated with other WCI partner jurisdictions to develop the Compliance Instrument Tracking System Service ("CITSS"). The CITSS is used, among other things, to issue and track ownership of compliance instruments, and to facilitate the submission of those instruments for the purpose of demonstrating compliance.[55] In 2013, the Québec and California staffs recommended additional steps to streamline the two programs' joint use of the CITSS and to harmonize tracking and compliance between the two jurisdictions even further, underscoring the importance of harmonization on this point.[56]

It was also important to ensure that the two programs had comparably stringent emissions reduction targets or caps.[57] While agreeing on a level of stringency was not necessary in order for a joint market to operate, failure to do so would have had significant implications in terms of how the linkage affected both participants' economies, and in terms of how politically acceptable the linkage was. A more stringent reduction target means that more emissions abatement is required overall, and it will thus tend to result in a higher price of allowances.[58] If two cap-and-trade programs with significantly different allowance prices link without first addressing this discrepancy, the result can be large transfers of both capital and actual emissions between the jurisdictions after the linkage takes effect.[59] These transfers could have presented a significant problem for policymakers in gaining political acceptance of a

54. Telephone Interview with Program Staff of Cal. Air Res. Bd., *supra* note 25; Telephone Interview with Luke Wisniewski, Maryland Dep't of Envtl. Protection, *supra* note 25; *see also* CAL. AIR RES. BD , *supra* note 52, at 17.

55. CAL. AIR RES. BD , *supra* note 52, at 17–18.

56. The recommendations were to require additional reporting by each program prior to transferring allowances from its account into a participant's account, and to reconcile the total number of allowances held throughout the CITSS at least monthly. *Id.* at 19–20.

57. *Id.* at 18 (indicating that the relative stringencies of the two programs were evaluated prior to linkage).

58. *See* Flachsland et al., *supra* note 23, at 364.

59. *See* Dion, *supra* note 20 (explaining that "[t]he relative stringency of jurisdictions' caps can . . . be an important driver of how permits flow between them"); Fedosov, *supra* note 19, at 211 ("A potential to undermine the environmental integrity of linked systems normally emerges from a situation when the emissions cap in one of the systems is lax . . . .").

linkage between California and Québec. In addition, the stringency of a program's emissions target sends an important signal about the level of effort the participating jurisdictions are willing to make.[60] A significant discrepancy in the stringency of the two programs' emissions reduction targets that was not addressed prior to linkage could lead to a sense of unfairness and questions about environmental integrity and equity in burden-sharing, which, again, could have presented significant political challenges to the linkage.[61] Harmonizing the relative stringencies of the two programs was therefore a high priority.

The Québec and California staffs also focused on harmonizing price control mechanisms. Specifically, the two programs worked to align what are referred to as the auction reserve price and the cost containment reserve price, mechanisms by which the program prevents the price of allowances from dropping too low or rising too high, respectively. Reaching agreement on an auction reserve price[62] was especially important because if the two programs had substantially different auction reserve prices in periods of low demand, when allowances were selling near that price, the lower price would essentially seep into the other market once the two linked.[63] This kind of policy spillover would not prevent the market from functioning after linkage, but it could result in some jurisdictions essentially dictating policy choices, while the policy and economic needs of other jurisdictions were not met, making political acceptance of the linkage challenging. Similar concerns about policy spillover caused California and Québec to prioritize harmonizing offset protocols,[64] including procedures for verifying offsets and making information about offset projects publicly available.[65]

60. Flachsland et al., *supra* note 23, at 363.

61. *Id.*

62. This means the minimum acceptable bid price per metric ton for current allowances in the primary auction.

63. *See* Burtraw et al., *supra* note 27, at 25 ("The key consideration is that the cost-containment measures in one market will be propagated to the other market."); Fedosov, *supra* note 19, at 211 (explaining that price management mechanisms are particularly prone to "'automatically propagate'" into a linked system).

64. "Offset" in this context means the practice of a regulated source complying with reduction requirements by paying someone outside the regulated sector to absorb or avoid the release of GHGs. *See* ANJA KOLLMUSS ET AL., MAKING SENSE OF THE VOLUNTARY CARBON MARKET: A COMPARISON OF CARBON OFFSET STANDARDS 1 (2008).

65. CAL. AIR RES. BD., *supra* note 52, at 20.

Another high priority was harmonizing procedures for the auctions themselves. The staffs worked together over the course of several years to develop requirements for the auction program, and "to ensure that [the system] support[ed] individual auctions by each program as well as joint auctions . . . .[66] As a result, the two programs' regulations set out essentially identical auction requirements, and the auction platform that has developed "supports a comprehensive set of auction processes and procedures . . . ."[67] Both parties believed that a close and continuing collaboration between the linked jurisdictions was essential if the linkage was to be successful.

IV. New Challenges in Linking RGGI with the WCI

RGGI's development paralleled that of the WCI in many ways. RGGI originated in 2003, when then-Governor Pataki of New York "invited nine other northeast states to develop a regional [GHG] cap-and-trade program [covering] power plants."[68] In early 2004, the participating states launched an in-depth stakeholder consultation process, gathering input from a wide range of participants in the electricity market and from environmental advocates.[69] That stakeholder consultation process culminated in the first regional RGGI allowance auction in September 2008. Thus, much like the WCI, RGGI "grew out of a long-term cooperative relationship" among its member states[70] that eventually "formed a foundation for a common approach to climate policy that was built through reciprocal unilateral links . . . ."[71] Also like the WCI, RGGI is an amalgam of the cap-and-trade programs instituted by each of its individual member states. The participating states signed a Memorandum of Understanding ("MOU") in which each state agreed that it would propose the cap-

66. *Id.* at 27.

67. *Id.* *See generally* Jean Yves Benoit & Claude Côté, *Essay by the Québec Government on Its Cap-and-Trade System and the Western Climate Initiative Regional Carbon Market: Origins, Strengths and Advantages*, 33 U.C.L.A. J. ENVTL. L. & POL'Y 42, 53 (2015).

68. BRIAN M. JONES ET AL., M. J. BRADLEY & ASSOCS., A PIONEERING APPROACH TO CARBON MARKETS: HOW THE NORTHEAST STATES REDEFINED CAP AND TRADE FOR THE BENEFIT OF CONSUMERS 10 (2017).

69. *Id.* at 11.

70. RGGI currently has nine member states: Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont.

71. Burtraw et al., *supra* note 27, at 8.

and-trade program outlined in the MOU for approval by its own state legislature or other relevant regulatory body.[72]

Despite these broad similarities, RGGI and the WCI did not cooperate closely during their development to ensure harmonization in the way that California and Québec did during the formation of the WCI. As a result, there are some important differences between the two programs. Some of these differences are relatively easy to manage and would not likely pose any significant barrier to linkage, even if they were not harmonized. For example, RGGI only regulates electricity generators,[73] whereas the WCI applies to multiple sectors of its member states' economies, such as suppliers of natural gas and various other fossil fuel products, and various manufacturing sectors.[74] RGGI also only covers carbon dioxide emissions, while the WCI covers other GHGs. Field experts and commentators alike suggest that these differences are merely technical and would not necessarily need to be aligned prior to linkage,[75] although doing so could bring administrative and political benefits.[76] However, there are other differences between the two programs that could jeopardize the success of a linkage. Notably, these areas would be important to align, not because failure to do so would prevent the basic functioning of the market, but rather because linking will lead to a "mixing" of program designs; if discrepancies in these areas were not resolved prior to linking, the resulting "mix" could fail to meet one or both of the participating jurisdictions' preexisting policy objectives.[77]

72. REG'L GREENHOUSE GAS INITIATIVE, MEMORANDUM OF UNDERSTANDING 2 (2005).

73. REG'L GREENHOUSE GAS INITIATIVE, REVISED MODEL RULE §§ XX–1.4 (2013).

74. *See* WESTERN CLIMATE INITIATIVE, DESIGN RECOMMENDATIONS FOR THE WCI REGIONAL CAP-AND-TRADE PROGRAM 1 (2009).

75. Telephone Interview with Program Staff of Cal. Air Res. Bd., *supra* note 63; Telephone Interview with William Lamkin, Envtl. Eng'g, Mass. Dep't of Envtl. Prot. (Apr. 27, 2017); Telephone Interview with Luke Wisniewski, *supra* note 25.

76. *See* Burtraw et al., *supra* note 27, at 27. If the political will existed to expand the scope of RGGI to cover more sectors of the economy and other GHGs, a linkage with the WCI could be an opportune moment. Telephone Interview with Dale Beugin, Author, Can.'s Ecofiscal Comm'n (Apr. 20, 2017). In addition to making the program more environmentally stringent, such an expansion would help the linkage to function more smoothly. Although it is not clear how politically realistic such an expansion of RGGI into a full-economy program is, eight of the nine RGGI states have goals to create such programs. Telephone Interview with Luke Wisniewski, *supra* note 25.

77. Flachsland et al., *supra* note 23, at 364.

A. Stringency of Emissions Cap

One key area to prioritize for alignment is the comparability of the two programs' emissions caps.[78] As alluded to above, comparably stringent emissions caps are crucial for successful linkage for two primary reasons. First, if one cap-and-trade program establishes a linkage with a second program that is much less stringent, there may be concerns about fairness and environmental integrity that make the linkage politically untenable in the more stringent cap. Second, because a program's stringency is the main determinant of the price of its allowances, differing stringencies therefore translate into differing prices in the two markets.[79] While the price will harmonize following linkage if the two markets conduct joint auctions, if the markets' initial price points are substantially different, the result will generally be an influx of capital into the market with the less stringent cap and lower prices, while emissions themselves shift to the more stringent market with higher prices.[80] This, too, may cause a political backlash in the more stringent market.

Unlike the partner jurisdictions that formed RGGI and the WCI, who negotiated and collaborated extensively on this issue, RGGI and the WCI themselves are quite far apart in terms of the stringency of their emissions caps. At the most recent WCI auction in February of 2018 the clearing price for allowances was $14.61,[81] while at the most recent RGGI auction in December of 2017 the clearing price was $3.80.[82] Thus, while a linkage between the WCI and RGGI should allow more cost-effective emissions reductions overall, it would likely also involve a substantial wealth transfer from the WCI participants to the RGGI participants. This could well mean that a proposed linkage would meet with vocal

78. One immediately apparent technical issue associated with harmonizing the RGGI and WCI caps is that RGGI's cap is measured in short tons, while the WCI's is measured in metric tons. This difference should not be an insurmountable obstacle to linkage, but it does mean that the programs would need to either harmonize their unit of measurement or establish an "exchange rate" between short and metric tons to ensure equivalency. Burtraw et al., *supra* note 27, at 27.

79. *Id.* at 28.

80. *Id.*

81. CAL. AIR RES. BD., CALIFORNIA CAP-AND-TRADE PROGRAM SUMMARY OF CALIFRONIA-ONTARIO-QUEBEC JOINT AUCTION SETTLEMENT PRICES AND RESULTS 1 (2018).

82. *Auction 38*, REGIONAL GREENHOUSE GAS INITIATIVE, https://rggi.org/auction/38 [https://perma.cc/9YXE-DEGG] (last visited Feb. 23, 2018).

opposition in California and Québec unless the two programs agreed to harmonize their caps.[83]

B. Auction Reserve Prices

RGGI and the WCI also have markedly different auction reserve prices, a discrepancy that, as discussed above, is a high priority for harmonization and can jeopardize successful linkage if not aligned. RGGI's auction reserve price is $2.15 for 2017,[84] while the WCI's is $13.57.[85] As commentators have pointed out, "[d]ifferent trigger prices for the [auction reserve and the containment reserve] will influence allowance flows and prices and there also is a strong potential for differing floors to erode the [environmental] integrity of the linked programs."[86] Linking two markets with significantly different auction reserve prices can also decrease the value of previous investments in those markets and hurt investor confidence.[87] Thus, the significant discrepancy between RGGI's floor price and the WCI's could potentially interfere with the effective functioning of the market if not harmonized prior to linkage.

C. Offset Protocols

Another key difference between RGGI and the WCI that could complicate linkage is their policies regarding the use of offsets for compliance. In the context of cap-and-trade, an offset means a reduction, avoidance, or sequestration of emissions from a source not covered by the program that is accepted for purposes of

83. If, for whatever reason, harmonization with respect to stringency was not politically viable—if, for example, the RGGI states were concerned about diluting the environmental integrity of their program—it might also be possible to establish some kind of exchange rate between the two program's allowances to enable them both to continue trading at their current prices. However, this would likely require giving up most of the economic efficiencies that would make linkage appealing in the first place.

84. REG'L GREENHOUSE GAS INITIATIVE, AUCTION NOTICE FOR CO2 ALLOWANCE AUCTION 36 ON JUNE 7, 2017, at 2 (2017).

85. CAL. AIR RES. BD. & QUE. OFF. OF THE MINISTRY OF SUSTAINABLE DEV., ENV'T AND THE FIGHT AGAINST CLIMATE CHANGE, CALIFORNIA CAP-AND-TRADE PROGRAM & QUÉBEC CAP-AND-TRADE SYSTEM: 2017 ANNUAL AUCTION RESERVE PRICE NOTICE 1 (2016).

86. Burtraw et al., *supra* note 27, at 29.

87. *Id.*; *see also* DAVE SAWYER & CAROLYN FISCHER, C.D. HOWE INST., BETTER TOGETHER? THE IMPLICATIONS OF LINKING CANADA—US GREENHOUSE GAS POLICIES 3 (2010) (describing a difference in price collar between two cap-and-trade schemes as a "material difference").

compliance with the program.[88] If linked programs accept different offset credits, or one accepts substantially more offset credits than the other does, this can create a "free-up" effect, whereby the sudden availability in one jurisdiction of offset credits that were not available prior to linkage effectively frees up room under the emissions cap.[89] This can have the effect of reducing allowance prices, but not total emissions in that jurisdiction.[90] In addition, if one program accepts a category of offsets that the other believes does not actually achieve equivalent GHG reductions, or is in some other way environmentally suspect, this too can lead to a sense that environmental integrity has been compromised. Harmonizing offset policies can therefore be important in order to avoid undermining environmental integrity and to ensure political acceptance of the linkage.[91]

RGGI and the WCI have adopted somewhat different offset policies. For example, RGGI allows offset projects relating to reduction in sulfur hexafluoride (SF_6) emissions in the electric power sector, and emissions reductions due to end-use energy efficiency, neither of which are recognized by the WCI partners.[92] Conversely, California and Québec recognize offsets from capture and destruction of methane relating to mining, and from destruction of ozone depleting substances, neither of which are recognized by RGGI.[93] The two programs also differ in the percentage of a covered entity's compliance obligation that can be met using offsets. California and Québec both allow up to 8%, while RGGI only allows up to 3.3%.[94]

88. PEW CTR. ON GLB. CLIMATE CHANGE, GREENHOUSE GAS OFFSETS IN A DOMESTIC CAP-AND-TRADE PROGRAM 2 (2008).

89. Burtraw et al., *supra* note 27, at 28–29.

90. *See* CTR. FOR RES. SOLS., RENEWABLE ENERGY CERTIFICATES, CARBON OFFSETS AND CARBON CLAIMS: BEST PRACTICES AND FREQUENTLY ASKED QUESTIONS 6–7 (2012).

91. Telephone Interview with Program Staff of Cal. Air Res. Bd., *supra* note 25 (indicating that offset protocols were something the two programs focused on closely to avoid political backlash).

92. *SF6 Emissions*, REGIONAL GREENHOUSE GAS INITIATIVE, http://www.rggi.org/market/offsets/categories/sf6 [https://perma.cc/QJ26-MDDS] (last visited Jan. 12, 2018).

93. Que. Office of the Ministry of Sustainable Dev., Env't and the Fight Against Climate Change, *Carbon Market Offset Credits*, GOV. QUE., http://www.mddelcc.gouv.qc.ca/changements/carbone/credits-compensatoires/index-en.htm#current-offset [https://perma.cc/UH74-PWC4] (last visited Aug. 1, 2017).

94. *See* REG'L GREENHOUSE GAS INITIATIVE, FACT SHEET: RGGI OFFSETS, available at http://www.rggi.org/docs/Documents/RGGI_Offsets_FactSheet.pdf [https://perma.cc/

This discrepancy in policies regarding offsets could give rise to concerns in partner jurisdictions that linkage might dilute the environmental integrity of the program. This could be a significant political stumbling block for the proposed linkage, particularly given California's relatively stringent requirement that any cap-and-trade program wishing to link with California's be determined to be comparably environmentally rigorous. It would therefore likely be advantageous for RGGI and the WCI to bring their offset policies into closer alignment before linking.

V. LEGAL BARRIERS TO CROSS-BORDER LINKAGE

As the foregoing section illustrates, there are a variety of important program elements that RGGI and the WCI would need to harmonize prior to linkage in order to ensure that the new joint market was successful and that both programs realized the desired benefits of the linkage. In order to achieve the necessary alignment, however, the two programs would need to engage in extensive dialogue and collaborate closely together to reach agreement on, for example, how to ensure that they had comparable emissions caps, what the minimum and maximum acceptable prices for allowances in the primary auction should be, what system to use for tracking allowances and monitoring compliance, and what offsets to accept. As detailed below, however, the closer the coordination with foreign jurisdictions, and the more binding the agreement, the greater the risk of triggering multiple bodies of U.S. constitutional law. The following sections examine this inherent tension and assess the strength of potential challenges based on the three constitutional arguments most likely to be invoked by linkage opponents in challenging a RGGI-WCI linking agreement: the dormant foreign affairs preemption doctrine, the dormant Commerce Clause (both domestic and foreign), and the Compact Clause.

A7EH-DNAZ] (last visited Jan. 12, 2018); Que. Office of the Ministry of Sustainable Dev., Env't and the Fight Against Climate Change, *supra* note 93. Despite the benefits of harmonization on this point, it bears noting that there are commonalities and differences among all three programs' offset policies, and California and Quebec's protocols are not perfectly harmonized. *See* CAL. AIR RES. BD., *supra* note 52, at 14 ("California and Québec have committed to continue collaborating on the development of the offset components of their programs, including offset protocols.").

Notably, although the WCI itself crosses an international border, it has not yet been subject to any legal challenges based on its international character,[95] and some commentators examining this issue have concluded that a linkage that crosses international borders in this way would likely survive constitutional challenge.[96] However, those conclusions depend on assuming debatable positions in several particularly nebulous areas of constitutional law.[97] Moreover, a RGGI-WCI linkage would involve both California and New York, which collectively represent a much more significant portion of the U.S. economy than has ever been covered by a single cap-and-trade market before.[98] In addition, some of the states participating in RGGI are considerably more politically conservative than California, the only U.S. state currently participating in the WCI. A sudden association with California's program could potentially generate strong opposition in some of those states.[99] For these reasons, it seems plausible that a RGGI-

95. There are ongoing challenges on other grounds not related to the international character of the linkage. *See* Chris Megerian, *California's Cap-and-Trade Program Survives a Legal Battle in a Win for Gov. Jerry Brown and Environmentalists*, L.A. TIMES (Oct. 3, 2017, 2:05 PM), http://www.latimes.com/politics/la-pol-sac-california-cap-trade-decision-20170406-story.html [https://perma.cc/T7JH-3TP4].

96. *See, e.g.*, David R. Hodas, *State Law Responses to Global Warming: Is It Constitutional to Think Globally and Act Locally?*, 21 PACE ENVTL. L. REV. 53, 79 (2003) (examining a range of subnational GHG initiatives, including RGGI, and concluding that they are not constitutionally offensive because "there is simply no federalism concern here"); Jeremy Lawrence, *Where Federalism and Globalization Intersect: The Western Climate Initiative as a Model for Cross-Border Collaboration Among States and Provinces*, 38 ENVTL. L. REP. NEWS & ANALYSIS 10796, 10797 (2008) (concluding that the WCI is not preempted by national foreign policy, and that neither the Compact Clause nor the Commerce Clause would be fatal); Nancy Shurtz, *Carbon Pricing Initiatives in Western North America: Blueprint for Global Climate Change Policy*, 7 SAN DIEGO J. CLIMATE & ENERGY L. 61, 125 (2015–2016) (concluding that "[m]ost local/regional tax and cap-and-trade programs in the U.S. are not going to violate the Commerce Clause"); Katie Maxwell, Comment, *Multi-State Environmental Agreements: Constitutional Violations or Legitimate State Coordination?*, 15 PENN ST. ENVTL. L. REV. 355, 372 (2007) (concluding that "RGGI will stand as a legitimate state effort in cooperation and not fall victim to its potential Constitutional violations."); Note, *Foreign Affairs Preemption and State Regulation of Greenhouse Gas Emissions*, 119 HARV. L. REV. 1877, 1877 (2006) [hereinafter *State Regulation of Greenhouse Gas Emissions*] (concluding that the federal foreign affairs power does not preempt mandatory state limits on GHG emissions).

97. Kysar & Meyler, *supra* note 38, at 1624–25; *see also* Wright, *supra* note 19, at 10490.

98. BUREAU OF ECON. ANALYSIS, U.S. DEP'T OF COMMERCE, NEWS RELEASE: GROSS DOMESTIC PRODUCT BY STATE: THIRD QUARTER 2016 (2017).

99. A brief note about standing is merited here. Regulated sources of GHGs, affected utilities, or NGOs focused on electricity ratepayers are all examples of entities that could conceivably seek to challenge the proposed agreement. Would-be challengers who wished to bring claims based on alleged interference with the federal government's authority in the

WCI linking agreement could encounter substantially more political resistance, and as a result a more robust legal challenge, than either program on its own has yet been subjected to. A fresh examination of these issues is therefore warranted.

Ultimately, although would-be challengers of the proposed linking agreement could certainly present colorable constitutional arguments against it, a successful challenge would generally require a court willing to push the relevant constitutional doctrines past their traditional limits. Moreover, there are some specific steps RGGI and the WCI could take in designing a linkage that would help to keep it from straying too close to the edges of constitutionality, and that should reduce the risk of successful legal challenge to acceptable levels.

A. Dormant Foreign Affairs Preemption

One significant potential obstacle to a cross-border linkage between RGGI and the WCI is the dormant foreign affairs preemption doctrine, sometimes known more simply as the foreign affairs power. This doctrine finds its origins in the 1968 Supreme Court case of *Zschernig v. Miller.*[100] *Zschernig* involved an Oregon probate law that prohibited foreign nationals from inheriting unless the heir's home jurisdiction allowed Americans to enjoy similar rights. Would-be heirs challenged the law as a violation of federal sovereignty over foreign affairs. In several respects, the facts of the case weighed against a finding that the Oregon statute was preempted: probate is a traditional area of state regulation; there was no federal law, treaty, or executive agreement that explicitly preempted the Oregon statute; and the Department of Justice conceded in an amicus brief that the Oregon statute did not unduly interfere with the United States' ability to conduct foreign relations.[101]

Nonetheless, the Court held that the statute represented an unacceptable "intrusion by the State into the field of foreign affairs

realm of foreign affairs or foreign commerce would presumably need to show that their harm stemmed from the agreement's international character in order to establish standing. *See, e.g.*, Lujan v. Defs. of Wildlife, 504 U.S. 555 (1992). This could be a difficult showing to make. Even if entities within the regulated states did not have standing to bring such claims, the federal government likely would.

100. Zschernig v. Miller, 389 U.S. 429 (1968).

101. *Id.* at 434.

which the Constitution entrusts to the President and the Congress."[102] The Court was concerned that the statute called upon Oregon to undertake inquiries into the soundness of foreign legal systems and into the credibility of foreign diplomatic statements.[103] The Court was also concerned that the Oregon statute "invited state judges, at the height of Cold War nuclear anxiety, to criticize foreign governments."[104] This, the Court believed, would unduly interfere with the federal government's "one voice" in foreign affairs and had "great potential for disruption or embarrassment."[105] Therefore, the Court struck down the statute as an invalid attempt by Oregon to establish its own foreign policy.[106]

The Court revisited the foreign affairs preemption doctrine thirty-five years later in *American Insurance Ass'n v. Garamendi*.[107] *Garamendi* involved a California statute called the Holocaust Victim Relief Act of 1999 that required insurers doing business in California to disclose information about insurance policies they sold in Europe between 1920 and 1945. The statute's purpose was to help ensure payment of proceeds from insurance policies that were confiscated from or otherwise wrongfully denied to Holocaust victims.[108] However, the U.S. federal government had already engaged in successful diplomacy with the German government on this issue, and Germany had signed an agreement with the U.S. in which it pledged to establish a foundation to compensate such losses.[109] The U.S. later reached similar agreements with Austria and France.[110] The challengers to the California statute, and the United States as amicus curiae, argued that the California statute interfered with the foreign policy of the federal government.[111]

The Court agreed, holding that the California statute was preempted despite the fact that the relevant agreements included no preemption clause. The finding of preemption rested solely on

102. *Id.* at 432.
103. *Zschernig*, 389 U.S. at 435, 440.
104. *State Regulation of Greenhouse Gas Emissions*, *supra* note 96, at 1879.
105. *Zschernig*, 389 U.S. at 434–35; *see also* Kysar & Meyler, *supra* note 38, at 1653–54.
106. *Zschernig*, 389 U.S. at 441.
107. Am. Ins. Ass'n v. Garamendi, 539 U.S. 396 (2003).
108. *Id.* at 401, 408–09.
109. *Id.* at 405.
110. *Id.* at 408.
111. *Id.* at 413.

"asserted interference with the foreign policy those agreements embod[ied]."[112] The Court found that the consistent Presidential foreign policy on this issue had been to seek to resolve Holocaust-era insurance claims by encouraging European insurers to work with an international commission developed to address such claims,[113] and not to use litigation or coercive sanctions.[114] The Court perceived a clear conflict between this federal foreign policy and California's approach, which was to use regulatory sanctions to compel disclosure and payment, as well as to create a new legal cause of action for Holocaust survivors if other sanctions should fail.[115] The California law, the Court held, compromised "'the very capacity of the President to speak for the Nation with one voice in dealing with other governments' to resolve claims against European companies arising out of World War II."[116] The Court therefore found that the state law was preempted.[117]

"Although *Garamendi* and *Zschernig* are both sometimes labeled 'dormant foreign affairs preemption' cases," of the two, only *Zschernig* is a true example of the Court finding "dormant" preemption.[118] The *Zschernig* decision was based on the premise that the federal government has an exclusive authority over foreign affairs that prevents states from pursuing certain policies, even if the state policies do not conflict with any policy chosen by the federal government.[119] Indeed, as referenced above, the federal government filed an amicus brief explicitly stating that the Oregon statute at issue did not conflict with any federal policy. The basis for the Court's decision in *Garamendi* was distinctly different. That holding was not premised on federal exclusivity in foreign affairs (a dormant preemption of any state action in that arena), but rather on the existence of a direct conflict between the state statute at issue and an explicit federal foreign policy.[120]

112. *Id.* at 417.

113. The International Commission on Holocaust Era Insurance Claims.

114. *Garamendi*, 539 U.S. at 421; *see also State Regulation of Greenhouse Gas Emissions*, *supra* note 96, at 1879.

115. *See Garamendi*, 539 U.S. at 424.

116. *Id.* at 424 (quoting Crosby v. Nat'l Foreign Trade Council, 530 U.S. 363, 381 (2000)).

117. *Id.* at 427.

118. *State Regulation of Greenhouse Gas Emissions*, *supra* note 96, at 1880.

119. *Id.*

120. *Id.*

1. Traditional Area of State Authority

Could the foreign affairs preemption doctrine as set out in *Zschernig* or *Garamendi* potentially present a barrier to the WCI and RGGI entering into a formal linking agreement? An important footnote in Justice Souter's opinion in *Garamendi* suggests that, while the Court did not apply dormant preemption in that case, *Zschernig* and dormant preemption are still good law. Justice Souter indicated that courts should analyze foreign affairs preemption using a two-step analysis. The first step is to ask whether the potentially preempted state action is in a traditional area of state responsibility. If the state is acting outside the traditional area of state responsibility, the state law will be preempted even if there is no demonstrated conflict with federal policy. Justice Souter refers to this as field preemption, and it resembles the kind of dormant foreign affairs preemption seen in *Zschernig*. If, however, the state is acting within a traditional area of state responsibility, then the state law will only be preempted if there is "a conflict, of a clarity or substantiality that would vary with the . . . importance of the state concern asserted."[121]

The first question, then, in determining whether a RGGI-WCI linkage would risk running afoul of the foreign affairs preemption doctrine is whether the RGGI states and California would be acting in an area of traditional state authority by entering into an agreement with Québec and Ontario to reduce GHG emissions. If the answer to this question is no, then would-be challengers to the linking agreement would have a much easier time making a colorable argument in favor of preemption because there would be no need for them to demonstrate any conflict with federal policy.

While it is not entirely clear how courts would resolve this issue, there are some compelling arguments in favor of a finding that such a linkage would indeed fall within the realm of traditional state authority. Environmental protection is often considered to be within states' traditional purview.[122] The states could argue that, by

121. *Garamendi*, 539 U.S. at 419 n.11.

122. *See, e.g.*, Hughes v. Alexandria Scrap Corp., 426 U.S. 794, 809 (1976) (emphasizing that actions by the state of Maryland to enhance its environment represented a legitimate state purpose); Kysar & Meyler, *supra* note 38, at 1649; James R. May, *Of Happy Incidents, Climate, Federalism, and Preemption*, 17 Temp. Pol. & Civ. Rts. L. Rev. 465, 470 (2008) (emphasizing that "[c]hief among sovereign rights of states, of course, is to protect public

entering into the linking agreement, they were allowing the cap-and-trade market to operate more cost-effectively and reducing the overall cost of reducing GHG emissions, ultimately allowing greater emissions reductions. This, in turn, would mitigate the environmental and public health impacts of climate change in the participating states, such as flooding, extreme temperatures, allergies, or the spread of diseases born by mosquitos or ticks. The states could also point to the health benefits for their citizens that would result from a reduction in emissions of GHG co-pollutants, such as sulfur dioxide, nitrogen oxides, and particulate matter.[123] Indeed, the Supreme Court has specifically acknowledged that GHG regulation is a state interest.[124] Moreover, climate change policy inevitably affects a variety of other arenas of unquestioned "traditional state authority," including states' regulation of their economies, of land use decisions, and of retail electricity distribution.[125]

There are, however, a number of counterarguments that linkage opponents could advance in support of the position that in entering into an international linking agreement the states were operating well outside the sphere of traditional state authority. First, opponents could argue, as some field experts have, that the evidence that linkage itself leads to reduced GHG emissions is far from overwhelming.[126] In addition, as discussed above, the impacts of linkage are likely to be unevenly distributed, and some jurisdictions may well actually experience an increase in emissions following linkage. With respect to co-pollutants, then, linkage opponents could potentially argue that states participating in the proposed linkage were exposing their environments and the health of their citizens to greater potential harm, rather than protecting them.[127] Moreover, opponents could point out that, because of the

health, welfare and property[,]" and that it is well-accepted that climate change will pose special problems for states on all these fronts).

123. *See, e.g.*, U.S. ENVTL. PROT. AGENCY, CLIMATE CHANGE INDICATORS IN THE UNITED STATES 59–70 (4th ed. 2016).

124. *See* Massachusetts v. E.P.A., 549 U.S. 497, 519–21 (2007).

125. Kysar & Meyler, *supra* note 38, at 1649.

126. *See, e.g.,* Judson Jaffe et al., *Linking Tradable Permit Systems: A Key Element of Emerging International Climate Policy Architecture,* 36 ECOLOGY L.Q. 789, 800 (2009) (arguing that linking can, under some circumstances, increase global emissions and increase leakage).

127. Importantly, however, in the particular case of the proposed RGGI-WCI linkage the RGGI states would be unlikely to experience such an increase in emissions. This is because RGGI's allowance prices are significantly lower than the WCIs, and there would therefore

global nature of the climate change problem, local regulation of GHG emissions does not necessarily translate directly into mitigation of the local consequences of climate change. A decision by one state to limit its GHG emissions arguably has little effect unless that decision is part of a plan to "encourage comparable actions by a sufficient number of other states and nations to render its program not just symbolically, but instrumentally efficacious."[128]

It is thus difficult to predict whether a court would find that the RGGI states and California were operating in an area of traditional state authority. Certainly, though, given the Court's previous recognition of states' interest in regulating GHGs, and the fact that states have been participating in carbon markets for years without courts striking them down as outside the states' authority, proponents of the linkage could mount a strong argument on this point.

2. Conflict with Federal Policy

Were a court to find that such a linking agreement was within an area of the states' traditional authority, thus requiring an actual conflict with federal policy for a finding of preemption, the states could contend that the federal government has not established any discernable foreign policy on climate change with which their actions could conflict. The current U.S. presidential administration has taken various actions signaling that climate change is no longer a priority of the U.S. government,[129] including

likely be upward pressure on the price of RGGI allowances following a linkage, as those in WCI jurisdictions sought to purchase the comparatively cheap allowances. As a result, one would expect to see fewer emissions in the RGGI states as emissions abatement became relatively less expensive compared to the cost of allowances.

128. Kysar & Meyler, *supra* note 38, at 1650.

129. President Trump signed an Executive Order on March 28, 2017, rescinding various actions taken by the Obama Administration intended to combat climate change and calling on the Environmental Protection Agency Administrator to review the Clean Power Plan. Exec. Order No. 13,783, 82 Fed. Reg. 16,093 (Mar. 28, 2017). That Order also lifted the moratorium on coal leasing on federal land, and ordered a review of rules regulating emissions from the oil and natural gas sector and hydraulic fracturing on federal lands. *Id.* at 16,096. The Trump Administration has also released a proposed budget that "would eliminate climate change research and prevention programs across the federal government . . . ." Coral Davenport, *Trump Lays Plans to Reverse Obama's Climate Change Legacy*, N.Y. TIMES (Mar. 21, 2017), https://www.nytimes.com/2017/03/21/climate/trump-climate-change.html [https://perma.cc/TWC9-F3VZ]. As Mick Mulvaney, the director of the White House Office of Management and Budget, said in explaining the Administration's

announcing that the U.S. will withdraw from the 2015 Paris climate accord.[130] However, most of those actions have taken the form of Executive Orders that simply call for a review of various environmental programs and regulations,[131] and a formal withdrawal from the Paris agreement will take years to accomplish. The states could therefore reasonably argue that the federal government still does not have any coherent, affirmative foreign "policy" on climate change with which a RGGI-WCI linking agreement could potentially conflict.

A recent Eastern District of California case, *Central Valley Chrysler-Jeep, Inc. v. Goldstene*,[132] offers some relevant guidance on when a federal policy exists. The *Central Valley* court explained that "[t]he term 'policy' as used in Zschernig and its progeny refers to a concrete set of goals, objectives and/or means to be undertaken to achieve a predetermined result."[133] The court drew a clear distinction between a policy and a strategy, describing a strategy as a "means to achieve an acceptable policy, but not the policy itself."[134] One can imagine challengers of a RGGI-WCI linking agreement seeking to characterize the Trump Administration's actions with respect to climate change as a 'policy' under *Central Valley* by arguing that they evince a clear goal: to ensure no U.S. participation in international agreements to reduce GHG emissions. By contrast, one can imagine proponents of a linking agreement seeking to characterize the Administration's actions either as the *absence* of any goal with respect to climate change, or indeed even as a tacit endorsement of state action as the preferred strategy, within the meaning of *Goldstene*, for reducing U.S. GHG

proposed budget, "[a]s to climate change, I think the President was fairly straightforward: We're not spending money on that anymore." *Id.*

130. Michael D. Shear, *Trump Will Withdraw U.S. from Paris Climate Agreement*, N.Y. TIMES (June 1, 2017), https://www.nytimes.com/2017/06/01/climate/trump-paris-climate-agreement.html [https://perma.cc/ZLR7-FTTU].

131. Exec. Order No. 13,783, 82 Fed. Reg. 16,093, 16,093, 16,095 (Mar. 28, 2017) (directing the heads of agencies to "review all existing regulations [and other agency actions] . . . that potentially burden the development or use of domestically produced energy resources;" and also directed the EPA Administrator to "take all steps necessary to review" various EPA rules, including the Clan Power Plan); Exec. Order No. 13,795, 82 Fed. Reg. 20,815, 20,815 (Apr. 28, 2017) (directing the Secretary of the Interior to "give full consideration to revising the schedule of proposed oil and gas lease sales . . . .").

132. Cent. Valley Chrysler-Jeep, Inc. v. Goldstene, 529 F.Supp.2d 1151 (E.D. Cal. 2007).

133. *Id.* at 1186.

134. *Id.*

emissions. The outcome would depend on which of these characterizations the court was inclined to accept.

One of the strongest arguments the Trump Administration could potentially advance in favor of a finding that the proposed RGGI-WCI linking agreement was interfering with an existing federal policy would take the form of what is sometimes known as the "bargaining chip" theory.[135] The Administration could assert that it planned to continue negotiations on an international climate change regime, and that, by entering into their own agreements with foreign jurisdictions, the states were reducing the Administration's leverage in those future negotiations and it its ability to persuade other countries to agree to its desired plan. This type of argument has persuaded the Supreme Court in the past. For example, in *Crosby v. National Foreign Trade Council*, the Court found that a Massachusetts law restricting the ability of Massachusetts and its agencies to interact with companies that did business with Burma (Myanmar) was preempted because it reduced the President's economic and diplomatic leverage in working with the world's nations to develop a comprehensive strategy with respect to Burma.[136] Notably, though, in these cases the federal government has generally had a relevant, pre-existing policy, clearly defined by an executive agreement. For the Trump Administration to advance a "bargaining chip"-type argument against the proposed RGGI-WCI linkage without any such explicit policy in place or demonstrable on-going formal negotiations would be a fairly aggressive stance. This is particularly true given that the Bush and Obama Administrations viewed state actions as an important part of U.S. climate change strategy.[137] While the Administration could certainly make a plausible "bargaining chip" argument, for a court to accept such an argument would be to push the limits of the conflict preemption doctrine even past where *Garamendi*, somewhat controversially, took them.[138]

135. Kysar & Meyeler, *supra* note 38, at 1637–40.

136. Crosby v. Nat'l Foreign Trade Council, 530 U.S. 363, 377 (2000). Similarly, in *Garamendi*, the Court was persuaded by the argument of the United States (as amicus curiae) that the state action was preempted because "'if the [California] law is enforceable the President has less to offer and less economic and diplomatic leverage as a consequence.'" Am. Ins. Ass'n v. Garamendi, 539 U.S. 396, 424 (2003) (quoting *Crosby*, 530 U.S. at 377).

137. Shelly Welton, *State Dynamism, Federal Constraints: Possible Constitutional Hurdles to Cross-Border Cap-and-Trade*, 27 NAT. RESOURCES & ENV'T 36, 38 (2012).

138. *See id.*

In sum, under the current political circumstances the foreign affairs preemption clause could present a barrier to a RGGI-WCI linkage, but it is far from certain that it would. The outcome of a foreign affairs preemption challenge would depend on how courts were inclined to characterize various facts in a multi-factored analysis. Overall, though, the states would have a strong basis for arguing that by entering into a linking agreement with Canadian carbon markets they were acting well within their authority to regulate GHGs and that their participation in such a linking agreement does not interfere with the U.S.'s ability to participate in global climate change discussions.

B. Dormant Foreign Commerce Clause

Many of the themes of federal uniformity and "one voice" that run through the Supreme Court's foreign affairs preemption jurisprudence also appear in its dormant Foreign Commerce Clause cases, and the dormant Foreign Commerce Clause could also potentially pose a constitutional obstacle to a RGGI-WCI linkage. However, as with the dormant foreign affairs analysis, proponents of a linkage have some strong arguments on their side that they could marshal to help protect the agreement from attack on these grounds.

The dormant Foreign Commerce Class is an extension of the more-familiar domestic dormant Commerce Clause doctrine, which prevents states from burdening or discriminating against interstate commerce, even where the federal government has not regulated it.[139] "The central rationale for [this] rule is to prohibit state or municipal laws whose object is local economic protectionism . . . ."[140] The Supreme Court has indicated that its dormant Foreign Commerce Clause inquiry contains all the same elements as the parallel domestic inquiry and, in addition, considers the special need for the federal government to speak with "one voice."[141] The Court has thus framed the dormant Foreign

139. *See* Barclays Bank PLC v. Franchise Tax Bd., 512 U.S. 298, 310 (1994); Wardair Can., Inc. v. Fla. Dep't of Revenue, 477 U.S. 1, 7 (1986).

140. C & A Carbone, Inc. v. Town of Clarkstown, 511 U.S. 383, 390 (1994).

141. *See Wardair Can.*, 477 U.S. at 9 (quoting Japan Line, Ltd. v. County of Los Angeles, 441 U.S. 434, 451 (1979)); *see also* Kysar & Meyler, *supra* note 38, at 1654–55.

Commerce Clause as a limitation on state action that parallels its domestic counterpart, but is even more stringent.[142]

In practice, however, the Supreme Court's dormant Foreign Commerce Clause analysis looks a great deal like the kind of implied conflict or field preemption analysis it uses in its foreign affairs preemption cases.[143] Indeed, the Court sometimes explicitly uses the language of preemption in its dormant Foreign Commerce Clause cases.[144] The Court's dormant Foreign Commerce Clause analysis examines whether there is an existent federal policy relevant to the state action at issue, and thus a potential threat to the federal government's ability to "speak with one voice."[145] It then examines whether there is a discernable intent on the part of Congress to preempt (or, conversely, to assent to) the state behavior at issue.[146] Finally, even in the absence of any specific federal action or any direct conflict with federal policy, the Court asks whether the state statute at issue encroaches on what should be federal authority "to speak for the United States among the world's nations."[147] In other words, a state action may be invalid simply because it implicates foreign policy issues that should properly be left to the federal government, even where the federal government has taken no action.[148]

142. Kysar & Meyler, *supra* note 38, at 1654–55; *see also Barclays Bank*, 512 U.S. at 311; Piazza's Seafood World, L.L.C. v. Odom, 448 F.3d 744, 749 (5th Cir. 2006); Nat'l Foreign Trade Council v. Natsios, 181 F.3d 38, 66 (1st Cir. 1999).

143. Kysar & Meyler, *supra* note 38, at 1654–56.

144. *See, e.g.*, *Barclays Bank*, 512 U.S. at 321 (quoting Container Corp. of Am. v. Franchise Tax Bd., 463 U.S. 159, 196–97 (1983)) (referencing with approval a prior decision's finding that there were no specific indications of congressional intent to preempt as the most significant factor in its finding that a state statute did not violate the "one voice" principle in the foreign commerce context); *Wardair Can.*, 477 U.S. at 3 (framing its holding that a Florida tax did not violate the foreign Commerce Clause as a finding that "Congress has not acted to pre-empt state taxes such as that imposed by Florida").

145. *See Wardair Can.*, 477 U.S. at 9–10 (finding that there was no dormant Foreign Commerce Clause violation because the appellant had failed to present evidence demonstrating any federal policy on which the federal government had spoken with "one voice," and because Congress had not remained silent but had affirmatively demonstrated its assent to the kind of state tax that was at issue).

146. *Id.*; *see also Barclays Bank*, 512 U.S. at 324–25 (finding no dormant Foreign Commerce Clause violation because it could "discern no 'specific indications of congressional intent'" to preempt the state action being challenged, and because it found that "Congress implicitly has *permitted* the States" to engage in the action at issue) (emphasis in original).

147. Crosby v. Nat'l Foreign Trade Council, 530 U.S. 363, 380 (2000).

148. *See Container Corp. of Am.*, 463 U.S. at 194.

The dormant Foreign Affairs preemption and the dormant Foreign Commerce Clause cases share an underlying concern about a state straying into foreign affairs in a way that is detrimental to the Nation as a whole.[149] However, with the dormant Foreign Commerce Clause there is a special emphasis on the dangers of a state becoming an independent *economic* actor vis-à-vis other nations.[150] This may present a difficulty for a linkage between RGGI and the WCI. In order for such a linkage to yield the desired economic efficiencies without undermining the environmental integrity of either program, the RGGI states would arguably need to behave as an independent economic entity with respect to the foreign jurisdictions of Québec and Ontario in myriad ways. In order to ensure a successful linkage that met the policy goals of both programs, they would need to negotiate about which sectors of their respective economies to regulate and to what degree, about auction reserve and cost containment reserve prices for allowances, about the development of offset programs, and various other related issues. Because linkage can reduce overall compliance costs, there is even the possibility that one state or group of states could use the prospect of denial of economic benefits to elicit certain concessions from the Canadian jurisdictions during the negotiation process.[151] The further the states moved along this spectrum, the more likely they would be to stray into the realm of foreign policy reserved for the federal government.[152]

Notably, because the dormant foreign Commerce Clause analysis also includes all the factors that make up the domestic dormant Commerce Clause analysis, the traditional dormant Commerce

149. *See Wardair Can.*, 477 U.S. at 7–8.

150. *Id.* at 12 ("For the dormant Commerce Clause, in both its interstate and foreign incarnations, only operates where the Federal Government has not spoken to ensure that the essential attributes of nationhood will not be jeopardized by States acting as independent economic actors.").

151. *See* Fedosov, *supra* note 19, at 213 (suggesting that California set the price in the linkage with Quebec because it was much bigger); Klinsky, *supra* note 44, at 158 (making the same point that California began to have an outsized effect, "California's decisions made it difficult for the remaining partners to design regulations that reflected their economic and political needs"); Ranson & Stavins, *supra* note 17, at 290.

152. *See, e.g.*, Erwin Chemerinsky et al., *California, Climate Change, and the Constitution*, 37 ENVTL. L. REP. 10653, 10653–54, 64 (2007) (examining California's cap-and-trade program alone, and concluding that "[t]he more that California attempts to engage in negotiations about economic or political discrepancies between trading systems, the more likely that it will enter the realm of foreign policy.").

Clause considerations, including whether a state law discriminates against out-of-state interests and the severity of the burden on interstate commerce, could also be used to challenge the proposed linking agreement.[153] This could have particular implications for the design of any provisions in the linking agreement intended to address leakage. For example, the parties might wish to include provisions in the linking agreement or in the implementing statutes that attempt to prevent leakage by limiting or prohibiting the importation of electricity from adjacent jurisdictions that have not put any price on GHG emissions.[154] The stronger these provisions, the greater the risk that would-be challengers could successfully argue that the provisions were protectionist and placed an undue burden on interstate commerce.

Opponents of a linkage agreement could thus present a colorable argument against the linkage based on the dormant Foreign Commerce Clause. However, many of the same responses referenced above in the foreign affairs preemption context would undercut their claims. For instance, proponents of the linkage could argue that there is no coherent federal policy on climate change for the states' actions to interfere with, that Congress has never attempted to preempt states from regulating GHGs using cap-and-trade markets, and that indeed states have been doing so for many years. Linkage proponents could also use the argument outlined above in the foreign affairs context that, by regulating GHGs in their territories, states are simply exercising sovereignty over their local environments and economies. Thus, proponents could assert that states were acting well within areas of their traditional authority, and were not intruding into foreign policy where the federal government alone should speak for the United States. Moreover, the proposed linking agreement would not be animated by any intent to burden foreign commerce or institute protectionist policies, and any extraterritorial economic effects would be merely incidental. These are factors that incline courts towards leniency in the traditional dormant Commerce Clause

153. *See* Daniel K. Lee & Timothy P. Duane, *Putting the Dormant Commerce Clause Back to Sleep: Adapting the Doctrine to Support State Renewable Portfolio Standards*, 43 ENVTL. L. 295, 300–01 (2013).

154. The proposed linking agreement could raise some new concerns about leakage that the WCI and RGGI have not already individually addressed. For example, Quebec, geographically adjacent to the RGGI states but not previously participating in a joint carbon market with them, might have new concerns about RGGI's policies for dealing with leakage.

jurisprudence,[155] and they would likely help bolster an argument that the linkage did not violate the dormant Foreign Commerce Clause.

C. Compact Clause

Finally, the Compact Clause[156] could present a barrier to a linking agreement between the WCI and RGGI.[157] The Compact Clause prohibits states from entering into "any Agreement or Compact," either with other states or with foreign powers, without Congressional consent.[158] The Constitution itself does not define "compact,"[159] but case law offers some clues as to when states have entered into one. Justice Rehnquist gave one of the Court's clearest statements about when a compact exists in *Northeast Bancorp, Inc. v. Board of Governors of Federal Reserve System.*[160] He articulated several "classic indicia" of a compact, including: reciprocal limitations on state action; cooperation among legislators or other officials in the participating jurisdictions in developing the agreement; the establishment of a joint organization or body to regulate implementation of the agreement;

155. Thomas Alcorn, *The Constitutionality of California's Cap-and-Trade Program and Recommendations for Design of Future State Programs*, 3 MICH. J. ENVTL. & ADMIN. L. 87, 132 (2013).

156. U.S. CONST. art I, § 10, cl. 3.

157. Linkage opponents could also potentially raise claims under the Treaty Clause of Art. I, § 10, cl. 1, which imposes a blanket ban on states entering into treaties. While the Treaty Clause contains the strongest language of all the relevant Constitutional provisions, jurisprudence interpreting this provision is not well-developed. Courts have generally tended to invoke the political question doctrine when executive authority with respect to treaties is at issue. *See e.g.*, Goldwater v. Carter, 444 U.S. 996, 999 (1979) (finding that whether the president may unilaterally terminate a treaty is by nature a political question); Terlinden v. Ames, 184 U.S. 270, 287–88 (1902) (finding that it is a political question whether a treaty survives when one country becomes part of another); Wang v. Masaitis, 416 F.3d 992, 1002–03 (9th Cir. 2005) (finding that what constitutes a constitutionally cognizable treaty partner under the Treaty Clause is a political question, in part because the courts lack judicially manageable standards for answering the question); Made in the USA Found. v. United States, 242 F.3d 1300, 1302 (11th Cir. 2001) (finding that what constitutes a treaty requiring Senate ratification is by nature a political question).

158. U.S. CONST. art. I, § 10, cl. 3.

159. U.S. Steel Corp. v. Multistate Tax Comm'n, 434 U.S. 452, 460–61 (1978) ("The Framers clearly perceived compacts and agreements as differing from treaties. The records of the Constitutional Convention, however, are barren of any clue as to the precise contours of the agreements and compacts governed by the Compact Clause.").

160. Northeast Bancorp, Inc. v. Bd. of Governors of Fed. Reserve Sys., 472 U.S. 159 (1985).

conditioning of the agreement's implementing statutes in one jurisdiction on action by other participating jurisdictions; and the inability of each participant to modify or repeal its implementing statute unilaterally.[161]

No court has ruled on whether the WCI or RGGI themselves constitute a compact, but litigants and commentators alike have argued that they do,[162] suggesting that proponents of a RGGI-WCI linkage should expect to encounter Compact Clause claims as well. The strength of an argument that a linking agreement between RGGI and the WCI constituted a compact would depend on how the agreement was structured. Establishing the envisioned bilateral linkage would necessarily involve reciprocity, in that each jurisdiction would have to agree to accept the other's allowances for purposes of demonstrating compliance by covered sources. Such a linking agreement would also require a significant degree of negotiation and cooperation among officials in the two jurisdictions in order to achieve the degree of harmonization necessary for the linkage to function effectively and be politically acceptable. However, the parties could plausibly design a linking agreement to avoid incorporating other indicia of a compact. For example, it need not necessarily involve the creation of a joint regulatory organization or body.[163] Similarly, the statutes or regulations implementing the agreement in each participating jurisdiction need not be conditioned in any way by action in any other jurisdiction. In addition, the agreement could be designed to allow each participant to modify or withdraw from the agreement unilaterally. While these design choices would help to avoid a Compact Clause challenge, policymakers and officials would have to weigh that benefit against the likely negative impacts on the stability and effective operation of the market.

Even if a court were to find that the proposed linking agreement constituted a compact, not all compacts require congressional approval. The Supreme Court made it clear as early as 1893 in

161. *Id.* at 175; *see also* Todd Jefferson Hartley, *Handshake Deals: The Future of Informal State Agreements and the Interstate Compacts Clause*, 22 U. FLA. J. L. & PUB. POL'Y 91, 105 (2011).

162. Thrun v. Cuomo, 976 N.Y.S.2d 320, 322 (N.Y. App. Div. 2013); *see also* Hartley, *supra* note 161, at 115.

163. It is true that both RGGI and the WCI arguably have such organizations, RGGI Inc. and WCI Inc. respectively. However, it may well be possible for these two existing organizations to regulate the linked market effectively without the need to establish a new overarching regulatory body.

Virginia v. Tennessee that it does not make practical sense for the terms of the Compact Clause to apply in their broadest possible sense.[164] As the Court explained in *Virginia v. Tennessee*:

> Looking at the clause in which the terms 'compact' or 'agreement' appear, it is evident that the prohibition is directed to the formation of any combination tending to the increase of political power in the States, which may encroach upon or interfere with the just supremacy of the United States.[165]

In other words, only compacts that increase state power at the expense of federal supremacy require congressional consent.[166]

The inquiry the Court's Compact Clause cases undertake to determine whether a compact encroaches on the power of the federal government (and therefore requires congressional approval) substantially parallels the inquiry detailed in the sections on the foreign affairs doctrine and the foreign Commerce Clause mentioned above.[167] Indeed, in the seminal Compact Clause case, *U.S. Steel Corp. v. Multistate Tax Comm'n*, the central arguments advanced by the challengers of the compact in favor of requiring congressional approval were that the compact encroached on federal supremacy by interfering with interstate commerce and by encroaching on the federal government's power with respect to foreign affairs.[168] It is therefore not necessary to analyze in detail the strengths and weaknesses of a potential argument that a linking agreement would require Congressional approval. The issues explored above regarding the potential impacts of a linking agreement on foreign affairs and foreign commerce would likely surface in a Compact Clause challenge. As discussed above,[169] the resolution of those arguments would depend on whether the court considered the linking agreement to be an instance of participating

164. *See* Virginia v. Tennessee, 148 U.S. 503, 518 (1893) ("There are many matters upon which different States may agree that can in no respect concern the United States.").

165. *Id.* at 519.

166. *See, e.g.*, U.S. Steel Corp. v. Multistate Tax Comm'n, 434 U.S. 452, 471 (1978); *see also* Michael S. Smith, Note, *Murky Precedent Meets Hazy Air: The Compact Clause and the Regional Greenhouse Gas Initiative,* 34 B. C. ENVTL AFF., L. REV. 387, 389 (2007).

167. *See infra* Part V.A–B.

168. *U.S. Steel Corp.*, 434 U.S. at 473–77; *see also* Northeast Bancorp, Inc. v. Bd. of Governors of Fed. Reserve Sys., 472 U.S. 159, 175–76 (1985) (analyzing petitioners' Compact Clause argument using a foreign affairs preemption analysis).

169. *See infra* Part V.A–B.

states regulating local environmental and economic issues that could "in no respect concern the United States,"[170] or an instance of those states attempting to establish their own foreign policy on climate change—an issue of global environmental and economic import calling for an international diplomatic resolution.

Even if the proposed linking agreement were found to be a compact requiring congressional approval, it is not a foregone conclusion that it has not received such approval. The Court's Compact Clause cases have long held that congressional consent may be either express or implied.[171] Moreover, the Court has acknowledged arguments in the legal literature that congressional consent should be inferred from congressional silence in the manner of a statute of limitations.[172] Interstate agreements regulating the emission of GHGs have existed in the U.S. for years, and in particular, the WCI linking agreement has been operating across an international boundary for several years without any congressional response. Proponents of a WCI-RGGI linkage could argue that the "statute of limitations" has effectively run, and that by failing to take any action to prevent this kind of agreement from operating Congress has implicitly given its consent.

Compared to the other relevant constitutional provisions, a Compact Clause challenge seems relatively easy for the states to design around. Even if linkage opponents could convince a court that the proposed linking agreement constituted a compact, they would still have substantial hurdles to overcome in demonstrating that congressional approval was required and that such approval had not already been tacitly given.

170. *U.S. Steel Corp.*, 434 U.S. at 468 (citing Virginia v. Tennessee, 148 U.S. 503, 519 (1893) (J. Field)) (citing interstate border issues and an agreement between states to drain a malarial district on their mutual border as other examples of interstate compacts that would not require congressional approval because they did not impact the interests of the United States).

171. *Virginia*, 148 U.S. at 521–22 ("The approval by congress of the compact entered into between the states upon their ratification of the action of their commissioners is fairly implied from its subsequent legislation and proceedings.").

172. *See U.S. Steel Corp.*, 434 U.S. at 485 n.8. (citing Robert M. White, Note, *The Constitutionality of the Multistate Tax Compact*, 29 VAND. L. REV. 453, 460 (1976)) ("A statute-of-limitations type of approach to the necessary duration of congressional silence before consent may be inferred has been suggested by one commentator.").

VI. SOLUTIONS

In order to link the WCI and RGGI successfully, the parties would need to strike "the difficult balance of staying clear of constitutional constraints while maintaining a stable carbon market linkage that has integrity over the long term."[173] Are there steps that the WCI and RGGI partners could take in developing a joint market that could make it more likely to survive potential constitutional challenges?

Chemerinsky et al. have examined this issue in the context of California's cap-and-trade program, and have discerned several relevant principles. The proposed linkage would be less vulnerable to claims under the dormant foreign affairs preemption doctrine and the dormant Foreign Commerce Clause if it emphasized that the program was intended to address local harms, and stressed the benefits that would accrue specifically to the participating states.[174] Grounding the program in legitimate state concerns about the environmental and health impacts of GHG emissions and their co-pollutants, about land use, regulation of state electricity markets, and other local issues would strengthen the argument that the program falls within the realm of traditional state authority. In particular, given that recent Supreme Court environmental cases have tended to be 5-4 decisions, the states would be well advised to provide a basis for their action beyond environmental concerns.[175] That said, Chemerinksy et al. point out that presenting hollow reasons for the action will make it difficult for states to present an adequate administrative record justifying it; they should ensure that they can point to a clear relationship between the decision to link and the harm to their citizens they claim it will prevent.[176] The states should also avoid framing the agreement as a way of correcting for the federal government's failure to act. The more the states highlight the inadequacies of the federal approach, the more they suggest a conflict between their actions and federal policy, and the easier an argument that they have strayed into the realm of foreign affairs and violated federal supremacy.[177]

173. Wright, *supra* note 19, at 10494.

174. *See* Chemerinsky et al., *supra* note 152, at 10655–56.

175. *Id.* at 10658.

176. *Id.*

177. *Id.* at 10659.

With respect to the dormant Commerce Clause, the likelihood of a successful challenge would be greatly reduced if the states were careful to avoid any appearance that they were motivated by a desire to punish states that did not participate in the program.[178] This recommendation would apply particularly to any attempt the linking agreement might make to prevent leakage. If the states agreed to limit leakage by imposing a fee on electricity generated in non-participating jurisdictions, for example, or otherwise treating electricity generated outside the borders of participating states differently, a dormant Commerce Clause challenge would likely be successful.[179] The more clearly the states can place the regulatory burden of the program within their own borders, the less vulnerable they will be to a claim that they were violating the dormant Commerce Clause.[180]

There are also several steps policymakers could take to mitigate the likelihood of a successful challenge under the Compact Clause. First, as is the case with both the WCI and RGGI, the joint market could be implemented through reciprocal legislation passed by each participating state. This would allow the two programs to harmonize their policies with respect to issues such as cap stringency, auction reserve price, monitoring and tracking systems, and offset programs—the areas identified above as being among the most important to align—without making the agreement so binding that it could be considered a compact or a treaty.[181]

Another important area to consider is the process, by which, the participants withdraw from the agreement. Policymakers would need to strike a delicate balance here. If it were too easy for a party to withdraw from the agreement, there would be a risk of the market disintegrating with little notice, and the linkage could struggle to achieve the stability necessary for efficient functioning. If, on the other hand, it was too difficult for parties to withdraw, the agreement could be so binding that it arguably interfered with the federal government's ability to bargain with other foreign powers on climate change issues.[182] The proposed linkage agreement would do best to seek a middle ground. For example, it could

178. *Id.*
179. *Id.* at 10655.
180. *Id.*
181. Wright, *supra* note 19, at 10494.
182. *Id.* at 10491.

model the approach taken by the WCI and adopt a provision allowing any party to withdraw with twelve months' notice. In this way, the proposed agreement could allow parties to withdraw, while ensuring that the market will not simply dissolve without notice.

Finally, the proposed linking agreement could simply state that it is not binding. It could explain that it does not limit each party's right to modify or repeal its own regulations put in place for purposes of the program, nor does it limit the U.S.'s sovereign rights.[183] Similarly, in an approach that both RGGI and the WCI have taken, it could include language expressly indicating openness to other jurisdictions linking in the future. Such language would help to diffuse an argument that the agreement impermissibly intruded on the federal government's sovereignty or limited its ability to bargain with foreign governments.[184]

VII. CONCLUSION

If well-constructed, a formal linkage between RGGI and the WCI could offer numerous economic, political, and administrative benefits to both markets. The two programs would need to work together closely ahead of linkage to ensure that the markets were sufficiently aligned to allow them to function effectively together. Officials in both jurisdictions should pay particular attention to aligning the programs with respect to their overall stringency, their auction reserve prices, their systems for monitoring compliance and tracking allowances, and the offsets they accept.

In creating a joint market, both RGGI and the WCI would need to weigh the efficiency benefits of harmonizing their programs against the potential legal risks that harmonization could bring. The more closely the two programs coordinated, and the more binding their linking agreement, the more susceptible they would be to claims that the agreement encroached on federal authority under the foreign affairs power, the dormant Foreign Commerce Clause, and the Compact Clause. These constitutional provisions could certainly pose very real challenges for a linkage between RGGI and the WCI, and policymakers in both jurisdictions would do well to consider their implications carefully. That said, it seems that a successful challenge under any one of these provisions would

183. *Id.*

184. *Id.* at 10494.

require not only fairly aggressive stances on the part of the federal government, but courts that were willing to push the limits of these constitutional doctrines. In addition, there are a variety of specific steps the states could take in designing the linking agreement that would reduce the likelihood of a successful constitutional challenge. On the whole, it seems quite possible for the parties to design a linking agreement that would allow them to receive the benefits of linkage while simultaneously mitigating the risk of legal challenge to acceptable levels.