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**IMPLEMENTING SECTION 111(D) OF THE CLEAN AIR ACT:  
THE PATHWAY TO REGIONAL CAP-AND-TRADE PROGRAMS?**

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In June, 2015, the U.S. Environmental Protection Agency (EPA) will likely finalize its Clean Power Plan, thereby requiring the nation's existing fleet of fossil fuel-fired electric generating units to cut carbon dioxide emissions by 30% from 2005 levels by 2030.<sup>2</sup> If the final rule follows EPA's proposal, it will require each state to meet a set reduction goal, but will also allow states to pool their resources and goals.

This article argues that a regional cap-and-trade system is the best way for most states to meet their obligations.<sup>3</sup> By leveraging the economies of scale of the existing regional power system, a regional cap and trade approach would likely allow states and the electricity industry to achieve emission reductions at the lowest possible cost.<sup>4</sup> With a larger pool of emitters and emission reduction opportunities, states with relatively stringent goals would be able to accomplish them more cheaply, and states with less stringent goals would be able to capture the

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<sup>2</sup> EPA, Proposed Rules, Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 79 Fed. Reg. 34830, 34832, 34838 (June 18, 2014) (hereinafter Clean Power Plan). EPA acknowledges that EGUs release "small amounts" of the greenhouse gases nitrous oxide and methane, *id.* at 34841 n. 13, but the Clean Power Plan will only address emissions of carbon dioxide, *id.* at 34951, § 60.5705(b).

<sup>3</sup> Although there is a lively ongoing debate over the relative benefits of cap and trade versus a carbon tax in the abstract, the specific emission reduction levels required by the Clean Power Plan clearly favor the cap and trade approach due to the certainty achieved by establishing a fixed cap on emissions. In contrast, the level of reductions that would result from a carbon tax is much less certain.

<sup>4</sup> See Clean Power Plan, *supra* note 2, at 34910 ("Just as ISO/RTO regions today share the benefits and costs of efficient EGU dispatch across state boundaries, there are significant efficiencies that could be captured by coordinating individual state plans or implementing multi-state plans within a grid region.").

benefits of additional emission reductions in ways that would go unrealized under an every-state-for-itself approach.<sup>5</sup>

These benefits can only be captured if states overcome their political differences sufficiently to work together on a regional basis. The record to date with respect to regional cap and trade systems is mixed, but the additional impetus of federally-mandated goals provides a fresh opportunity for states to seek mutually-beneficial outcomes.

This article begins by providing an overview of the draft Clean Power Plan, including its support for a regional approach. It then reviews the pre-Clean Power Plan efforts, both successful and unsuccessful, to create regional cap and trade programs in North America. Next it turns to the potential benefits of such a regional approach, followed by a discussion of the potential barriers. It concludes with a proposed path forward.

## I. OVERVIEW OF EPA'S CLEAN POWER PLAN

### A. EPA's proposed best system of emission reduction (BSER) consists of four building blocks

Section 111(d) of the federal Clean Air Act (CAA) gives EPA the authority to regulate emissions of air pollutants from existing sources by requiring states to adopt emissions “standards of performance” for those sources.<sup>6</sup> The standards of performance must reflect EPA’s determination of the “best system of emission reduction [BSER] which . . . has been adequately demonstrated.”<sup>7</sup>

The Clean Power Plan proposes to regulate carbon dioxide emissions from existing fossil-fuel electric generating units (EGUs).<sup>8</sup> States would require these “affected EGUs” to reduce emissions through application of a BSER consisting of four “building blocks” that the EPA considers adequately demonstrated in real-world applications to date:<sup>9</sup>

1. Heat rate (efficiency) improvements at coal-fired power plants.<sup>10</sup>
2. Emission reductions by redispatching from coal-fired power plants to natural gas combined cycle (NGCC) plants.<sup>11</sup>
3. Expansion of renewables.<sup>12</sup>
4. Reduced power consumption through demand-side energy efficiency.<sup>13</sup>

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<sup>5</sup> EPA itself “recognizes that multi-state collaboration would likely offer lowest-cost . . . CO<sub>2</sub> emission reductions.” Clean Power Plan, *supra* note 2, at 34900.

<sup>6</sup> 42 U.S.C. § 7411(d) (2014).

<sup>7</sup> *Id.* § 7411(a)(1) (2014).

<sup>8</sup> See Clean Power Plan, *supra* note 2, at 34954 (§ 60.5795) for the plan’s formal statement of the targeted EGUs.

<sup>9</sup> Clean Power Plan, *supra* note 2, at 34835.

<sup>10</sup> Clean Power Plan, *supra* note 2, at 34856, 34859–62.

<sup>11</sup> Clean Power Plan, *supra* note 2, at 34857, 34862–66.

<sup>12</sup> Clean Power Plan, *supra* note 2, at 34866–71.

EPA used these building blocks to develop state emission reduction goals expressed as emission rates (pounds of CO<sub>2</sub> emitted per megawatt hour of power generated). However, emissions trading schemes, like the cap-and-trade approach advocated in this article, typically track the total mass of participants' emissions. To accommodate this alternative, EPA has provided guidance for translating the initial rate-based goals to mass-based equivalents.<sup>14</sup>

In utilizing the building blocks to achieve their goals, states are authorized by the Clean Power Plan to use “market-based trading programs.”<sup>15</sup> A state could thus implement the BSER by participating in a cap-and-trade system that captures the emissions reduction benefits of the building blocks.

### **B. Each state must submit an implementation plan for EPA approval**

Each state must submit a state implementation plan (SIP) by June 30, 2016, unless EPA grants a one-year extension.<sup>16</sup> A SIP must identify the extent of the plan's reach, both geographically (in the case of a multi-state plan) and in terms of which “affected entities” the plan covers—potentially a broader reach than the “affected EGUs” that are the focus of the Clean Power Plan.<sup>17</sup> The SIP must also include the relevant emission target, the detailed standards to be used in reaching it, and an explanation of how those standards will reach the goal at various points in time.<sup>18</sup> The SIP must also describe informational and procedural requirements imposed on affected entities and the states themselves, demonstrate legal authority to implement the plan, and justify the state's various calculations and projections.<sup>19</sup> If a SIP will regulate affected entities other than affected EGUs, it must include projections and monitoring plans for those entities.<sup>20</sup>

### **C. The draft regulations strongly encourage a regional approach**

The Clean Power Plan offers a number of benefits to states that choose a regional approach, particularly if it “reflect[s] the regional structure of electricity operating systems that exist in most parts of the country.”<sup>21</sup> Partnering states will be given an extra year to develop their SIP,<sup>22</sup> and may submit a single SIP on behalf of the group.<sup>23</sup> States can also join an

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<sup>13</sup> Clean Power Plan, *supra* note 2, at 34871–75.

<sup>14</sup> See EPA, Office of Air and Radiation, Projecting EGU CO<sub>2</sub> Emission Performance in State Plans (June 2014), available at <http://www2.epa.gov/carbon-pollution-standards/clean-power-plan-proposed-rule-projecting-egu-co2-emission-performance-detailed-guidance-on-translation>; EPA, Office of Air and Regulation, Clean Power Plan Proposed Rule: Translation of the State-Specific Rate-Based CO<sub>2</sub> Goals to Mass-Based Equivalents (Nov. 6, 2014) [hereinafter “Translation TSD”], available at <http://www2.epa.gov/carbon-pollution-standards/clean-power-plan-proposed-rule-translation-state-specific-rate-based-co2-actual-example-of-translation-under-two-sets-of-simple-assumptions>.

<sup>15</sup> *Id.* at 34837.

<sup>16</sup> *Id.* at 34952 (§ 60.5755(c)).

<sup>17</sup> See *id.* at 34951 (§ 60.5740(a)(1)–(2)). For definitions of “affected entity” and “affected EGU,” see *id.* at 34955–56 (§ 60.5820 “Definitions”).

<sup>18</sup> *Id.* at 34951–52 (§ 60.5740(a)(3)–(6)).

<sup>19</sup> *Id.* at 34592 (§ 60.5740(a)(8)–(11)).

<sup>20</sup> *Id.* at 34592 (§ 60.5740(a)(7)).

<sup>21</sup> See Clean Power Plan, *supra* note 2, at 34834.

<sup>22</sup> *Id.* at 34952 (§ 60.5755).

<sup>23</sup> *Id.* at 34838, 34911.

existing regional program, rather than creating a new compliance program from whole cloth.<sup>24</sup> EPA also projects that a regional approach will result in substantially lower compliance costs.<sup>25</sup> In addition, EPA has solicited comments on “other potential mechanisms for fostering multi-state collaboration,” suggesting that the final rule may contain further incentives for regional collaboration.<sup>26</sup>

## **II. A BRIEF REVIEW OF PRE-CLEAN POWER PLAN EFFORTS TO CREATE REGIONAL CAP-AND-TRADE SYSTEMS**

### **A. The failure of the Western Climate Initiative**

#### **1. Initial agreements and loss of political cohesion**

In 2007, the governors of Washington, Oregon, California, Arizona, and New Mexico agreed to “collaborate in identifying, evaluating and implementing ways to reduce GHG emissions in our states collectively.”<sup>27</sup> Toward this end, the states agreed to set a regional goal for emission reductions and develop a “regional market-based multi-sector mechanism, such as a . . . cap and trade program” to reach that goal.<sup>28</sup>

The agreement, known as the Western Climate Initiative (WCI), also included shared information gathering and management in support of such a system, promotion of renewables and energy efficiency, advocacy for regional and national climate policy, and identification of measures for climate change adaptation in the region.<sup>29</sup> By 2008, the governors of Montana and Utah and premiers of British Columbia, Manitoba, Ontario, and Quebec joined the original five states.<sup>30</sup> Working together, the 11 jurisdictions released the *Design for the WCI Regional Program* in 2010.<sup>31</sup>

The program called for a cap-and-trade program spanning “most sectors of the economy” and including almost 90% of the economy-wide emissions from the 11 jurisdictions.<sup>32</sup> Each jurisdiction was to implement its own cap-and-trade program.<sup>33</sup> A regional allowance market would link the systems, capturing efficiencies as widely as possible by accepting each jurisdiction’s allowances for compliance in any other participating jurisdiction.<sup>34</sup> Each

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<sup>24</sup> See *id.* at 34836. See sections II.B and II.C, *infra*, for discussions of existing carbon cap-and-trade systems in the Northeast and California, respectively.

<sup>25</sup> See *id.* at 34839–41 (cost-benefit calculations for the Clean Power Plan under various assumptions).

<sup>26</sup> *Id.* at 34900.

<sup>27</sup> Christine O. Gregoire, Governor of Washington, Theodore R. Kulongoski, Governor of Oregon, Arnold Schwarzenegger, Governor of California, Janet Napolitano, Governor of Arizona, and Bill Richardson, Governor of New Mexico, “Western Regional Climate Action Initiative” at 2 (Feb. 26, 2007), available at <http://www.westernclimateinitiative.org/component/remository/general/WCI-Governors-Agreement/>

<sup>28</sup> *Id.*

<sup>29</sup> *Id.*

<sup>30</sup> *Id.*

<sup>31</sup> *Id.* See Western Climate Initiative, *Design for the WCI Regional Program* (Jul. 2010) [hereinafter *WCI Design*], available at <http://www.westernclimateinitiative.org/the-wci-cap-and-trade-program/program-design>.

<sup>32</sup> *WCI Design*, *supra* note 31, at 5.

<sup>33</sup> *Id.* at 6.

<sup>34</sup> *Id.*

jurisdiction would have the opportunity to verify that another jurisdiction's program was consistent with its own requirements before linking the two.<sup>35</sup>

From 2008 to 2011, however, political and economic realities set in. Arizona, New Mexico, and Utah all elected governors opposed to cap-and-trade.<sup>36</sup> Meanwhile, state legislatures in Washington, Oregon, and Montana failed to advance toward enactment of cap-and-trade legislation.<sup>37</sup> Finally, in November, 2011, six states withdrew from the WCI, leaving only California and the four Canadian provinces.<sup>38</sup>

Nevertheless, vestiges of the WCI straggle on. Western Climate Initiative, Inc., persists as a non-profit corporation whose board consists of officials from California, British Columbia, and Québec.<sup>39</sup> It provides administrative and technical support to state and provincial governments implementing carbon emissions trading schemes.<sup>40</sup> These three governments, as well as the provinces of Ontario and Manitoba, continue to work together through the WCI to “develop and harmonize their emissions trading program policies.”<sup>41</sup>

## **2. Constitutional barriers to WCI**

If the WCI had somehow maintained its political cohesion, it most likely would have been struck down under various provisions of the U.S. Constitution designed to prevent intrusion by states into areas of federal authority.

### **a. Interstate commerce clause**

Initially, the WCI had hoped to include all the states in the Western Interconnection, thereby avoiding the prickly issue of how to treat the importation of electricity from jurisdictions not subject to the WCI emissions limitations, a problem commonly referred to as leakage. When that hope soon faded, the remaining states began to craft policies to combat leakage. However, the policy options considered by the WCI all would have imposed burdens on power producers or wholesalers seeking to bring power into the WCI region, and this disparate treatment across state borders would likely have run afoul of what courts call the Dormant Commerce Clause. That is, the Commerce Clause in Article I of the Constitution vests power to regulate interstate commerce in Congress, and courts have inferred the inverse—that the mere potential for Congressional action imposes limits on state power over commerce.<sup>42</sup>

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<sup>35</sup> *Id.* at 22.

<sup>36</sup> Geoffrey Craig, “Six US States Leave the Western Climate Initiative,” *Platts* (Nov. 18, 2011), available at <http://www.platts.com/latest-news/electric-power/washington/six-us-states-leave-the-western-climate-initiative-6695863>.

<sup>37</sup> *Id.*

<sup>38</sup> *Id.*

<sup>39</sup> Western Climate Initiative, Inc., “Western Climate Initiative, Inc.” (2014), available at <http://www.wci-inc.org/>.

<sup>40</sup> *Id.*

<sup>41</sup> Western Climate Initiative Inc., “Program Design” (2014), available at <http://www.wci-inc.org/program-design.php>

<sup>42</sup> See *Cooley v. Bd. of Wardens of Port of Phila.*, 53 U.S. 299, 319–20 (1851). The Supreme Court recently summarized: “The modern law of what has come to be called the dormant Commerce Clause is driven by

## b. Supremacy Clause

The Supremacy Clause establishes federal law as the supreme law of the United States.<sup>43</sup> In practice, this means that a state law may be preempted if it: (a) directly conflicts with a federal law or policy and compliance with both is impossible (“conflict preemption”); or (b) reaches into an exclusively federal arena (“field preemption”). The WCI leakage provisions arguably would have conflicted with the Federal Power Act, which places the interstate transmission and pricing of electricity within the jurisdiction of the Federal Energy Regulatory Commission (FERC).<sup>44</sup> It also might have conflicted with EPA efforts to regulate greenhouse gases (GHGs) under the CAA in the wake of *Massachusetts v. EPA*.<sup>45</sup>

To the extent that WCI represented not merely an interstate, but an international agreement among sub-national governments, it may also have violated the federal foreign affairs power. Foreign affairs have long been considered an area of authority “which the Constitution entrusts to the President and the Congress.”<sup>46</sup> To the extent that WCI was seen as affecting U.S.-Canada relations on climate change, or Canada’s own internal policymaking, by inclusion of several Canadian provinces, a court might have held any eventual WCI system preempted.

## c. Compacts Clause

A reviewing court might also have seen the WCI scheme as violating the Compacts Clause of the Constitution, which requires that “[n]o State shall without the Consent of Congress, . . . enter into any Agreement or Compact with another State or with a Foreign Power[.]”<sup>47</sup> In practice, the Supreme Court’s application of the Clause has been far more limited than the bare text might suggest.<sup>48</sup> The thrust of the analysis is whether the agreement “enhance[s] state power at the expense of federal supremacy.”<sup>49</sup> Still, the case law weighing the acceptability of interstate agreements is thin, and for state-and-foreign agreements, even more so. The WCI potentially presented issues under both.

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concern about ‘economic protectionism—that is, regulatory measures designed to benefit in-state economic interests by burdening out-of-state competitors.’” *Dep’t of Revenue of Ky. v. Davis*, 553 U.S. 328, 337–38 (2008) (quoting *New Energy Co. of Ind. v. Limbach*, 486 U.S. 269, 273–74 (1988)).

<sup>43</sup> U.S. Const., Art. IV, cl. 2.

<sup>44</sup> 16 U.S.C. § 824(a), (b).

<sup>45</sup> 549 U.S. 497 (2007).

<sup>46</sup> *Zschernig v. Miller*, 389 U.S. 429, 432 (1967) (citing *Hines v. Davidowitz*, 312 U.S. 52, 63 (1941)). The limits of this form of federal preemption are not clearly delineated. *Am. Ins. Ass’n, Inc., v. Garamendi*, 539 U.S. 396, 419–20 (2003) (“It is a fair question whether respect for the executive foreign relations power requires a categorical choice between the contrasting theories of field and conflict preemption evident in the *Zschernig* opinions, but the question requires no answer here.”). At a minimum, “state law must give way where . . . there is evidence of clear conflict between the policies adopted by” the state and federal government. *Id.* at 421. But the power may even extend to “dormant foreign affairs preemption” analogous to the Commerce Clause power. *See id.* at 439–40 (Ginsburg, J., dissenting) (associating *Zschernig* with such a view and dissenting from the majority’s reliance on *Zschernig*).

<sup>47</sup> U.S. Const., Art. I, § 10, cl. 3

<sup>48</sup> *See, e.g.*, *U.S. Steel v. Multistate Tax Comm’n*, 434 U.S. 452 (1978); *Northeast Bancorp, Inc. v. Bd. of Governors of Fed. Reserve Sys.*, 472 U.S. 159, 175–76 (1985) (apparent agreement between states did not even constitute a “compact.”).

<sup>49</sup> *U.S. Steel*, 434 U.S. at 472 (1978).

## B. The success of RGGI

In 2005, the governors of seven northeast states signed a memorandum of understanding for the formation of a regional CO<sub>2</sub> emission cap-and-trade scheme, called the Regional Greenhouse Gas Initiative (RGGI).<sup>50</sup> In 2007, Massachusetts, Rhode Island,<sup>51</sup> and Maryland joined, bringing total participation to ten states<sup>52</sup> (though New Jersey withdrew in 2011).<sup>53</sup> Significantly, RGGI considered measures to address leakage akin to those proposed under the WCI, but rejected them due to Commerce Clause concerns.<sup>54</sup> In other words, RGGI took a very practical approach by choosing to design a program that sacrificed some of its effectiveness in order to avoid a potentially fatal Constitutional showdown.

Nevertheless, RGGI has made sufficiently effective such that the Clean Power Plan relies on it as a real-world example of a successful regional cap-and-trade program.<sup>55</sup> The program sets an aggregate cap on emissions from existing EGUs in the region with generating capacity of at least 25 MW.<sup>56</sup> This cap is apportioned among the participating states, and beginning in 2015, each state's CO<sub>2</sub> emission budget decreases by 2.5% per year.<sup>57</sup>

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<sup>50</sup> See generally States of Connecticut, Delaware, Maine, New Hampshire, New Jersey, New York, and Vermont, "Regional Greenhouse Gas Initiative: Memorandum of Understanding" (Dec. 20, 2005), available at [http://rggi.org/docs/mou\\_final\\_12\\_20\\_05.pdf](http://rggi.org/docs/mou_final_12_20_05.pdf).

<sup>51</sup> Regional Greenhouse Gas Initiative, Inc., "Memorandum of Understanding," <http://rggi.org/design/history/mou> (accessed Nov. 21, 2014).

<sup>52</sup> "Regional Greenhouse Gas Initiative: Second Amendment to Memorandum of Understanding," (Apr. 20, 2007), available at [http://rggi.org/docs/mou\\_second\\_amend.pdf](http://rggi.org/docs/mou_second_amend.pdf).

<sup>53</sup> Letter from Bob Martin, Commissioner, State of New Jersey Department of Environmental Protection, to governors of the other nine RGGI states, "Notice of Withdrawal of Agreement to the RGGI Memorandum of Understanding" (Nov. 29, 2011), available at [http://rggi.org/docs/Documents/NJ-Statement\\_112911.pdf](http://rggi.org/docs/Documents/NJ-Statement_112911.pdf). The story of New Jersey's withdrawal may not quite be finished. In March, 2014, the Superior Court of New Jersey, Appellate Division, ruled that Governor Christie's withdrawal of New Jersey from RGGI did not terminate its GHG allowance trading program. In re Regional Greenhouse Gas Initiative, 2014 WL 1228509 at \*1 (N.J. Super. Ct. App. Div. Mar. 25, 2014). Because the trading regulation was worded broadly enough to operate independently of RGGI, withdrawal from RGGI did not automatically operate to terminate the program. *Id.* Thus, the court remanded the case with instructions to repeal or amend the program within 60 days in compliance with the New Jersey Administrative Procedure Act. *Id.*

<sup>54</sup> See RGGI Emissions Leakage Multi-State Staff Working Group, Initial Report to RGGI Agency Heads, "Potential Emissions Leakage and the Regional Greenhouse Gas Initiative (RGGI): Evaluating Market Dynamics, Monitoring Options, and Possible Mitigation Mechanisms" 58 (Mar. 14, 2007), available at [http://www.rrgi.org/docs/il\\_report\\_final\\_3\\_14\\_07.pdf](http://www.rrgi.org/docs/il_report_final_3_14_07.pdf).

<sup>55</sup> Clean Power Plan, *supra* note 2, at 34834 (in general), 34848 (market-based emission limits), 34855, 34897, 34916 (multi-state CO<sub>2</sub> emission reduction system), 34858, 34862 (emission reductions achievable by redispatch to NGCC), 34881, 34897 (state flexibility in light of interconnected nature of U.S. electricity sector), 34900 (investment of auction proceeds toward emission reduction goals), 34901 (imposition of ultimate responsibility on EGUs).

<sup>56</sup> Memorandum of Understanding, *supra* note 50, at 2.

<sup>57</sup> *Id.* at 2-3. Regional CO<sub>2</sub> emissions fell sharply in the RGGI states during the program's early years, due largely to the displacement of coal generation by natural gas, as well as the economic recession and energy conservation. Beth Daley, "Mass. to Lower Cap on Emissions by Power Plants," *The Boston Globe* (Feb. 8, 2013), available at <http://epaper.bostonglobe.com/epaper/showlink.aspx?bookmarkid=8NNHRWRMHFG8&preview=article&linkid=119c025d-e7a5-4286-98fc-ea21b566f9f1>. In response, the RGGI states lowered the cap from 165

On September 25, 2008, RGGI held its first auction for CO<sub>2</sub> allowances.<sup>58</sup> RGGI has held quarterly allowance auctions ever since.<sup>59</sup> As of the most recent auction, held December 3, 2014,<sup>60</sup> the auctions have raised a total of over \$1.93 billion in revenue.<sup>61</sup> RGGI reports that of the nearly \$1 billion collected by the states other than New Jersey through the 2012 reporting period, the states invested over \$700 million in a wide range of programs.<sup>62</sup> Sixty-five percent of these investments went to improved energy efficiency, 17% went to direct bill assistance for electricity ratepayers, and 6% each went to clean & renewable energy development and to greenhouse gas abatement projects.<sup>63</sup> Just 6% went to state administrative costs and RGGI, Inc. support programs.<sup>64</sup> RGGI projects that this \$700 million investment will return more than \$2 billion in lifetime energy bill savings for 3 million households and 12,000 businesses in its covered area.<sup>65</sup> In addition, RGGI notes an independent report by the Analysis Group that estimated a net gain of 16,000 job-years of employment thanks to the first three years of RGGI investments.<sup>66</sup>

### C. California's ongoing collaboration with Quebec

California's Assembly Bill (AB) 32, the Global Warming Solutions Act of 2006, broadly authorized the California Air Resources Board (CARB) to reduce California's GHG emissions.<sup>67</sup> In 2012, CARB initiated a cap-and-trade system, including allowance auctions.<sup>68</sup> California's 2014–2015 budget appropriates \$832 million in auction proceeds for expenditures furthering the goals of AB 32.<sup>69</sup>

CARB's regulations set general requirements for linking California's cap-and-trade system to outside systems so that allowances issued in one system may be surrendered for

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million tons in 2013 to 91 million tons in 2014, a decrease of about 45%. RGGI, Inc., "The RGGI CO<sub>2</sub> Cap," <http://rggi.org/design/overview/cap> (accessed Nov. 21, 2014).

<sup>58</sup> RGGI, Inc., "Auction 1," [http://www.rrgi.org/market/co2\\_auctions/results/Auctions-1-16/117](http://www.rrgi.org/market/co2_auctions/results/Auctions-1-16/117) (accessed Nov. 21, 2014).

<sup>59</sup> See RGGI, Inc., "Auctions 1–24," [http://www.rrgi.org/market/co2\\_auctions/results/auctions-1-24](http://www.rrgi.org/market/co2_auctions/results/auctions-1-24) (accessed Nov. 21, 2014).

<sup>60</sup> RGGI, Inc., "Auction 25," [http://www.rrgi.org/market/co2\\_auctions/results/auction-25](http://www.rrgi.org/market/co2_auctions/results/auction-25) (accessed Nov. 21, 2014)

<sup>61</sup> [http://www.rrgi.org/market/co2\\_auctions/results](http://www.rrgi.org/market/co2_auctions/results)

<sup>62</sup> Regional Greenhouse Gas Initiative, Inc., "Regional Investment of RGGI CO<sub>2</sub> Allowance Proceeds, 2012" 7, Tables 2 and 3 (2014), available at [http://www.rrgi.org/rggi\\_benefits](http://www.rrgi.org/rggi_benefits).

<sup>63</sup> *Id.* at 3, Figure 2.

<sup>64</sup> *Id.* See also *id.* at 33 (defining program categories "Administration" and "RGGI, Inc." as used in figures).

<sup>65</sup> *Id.* at 3.

<sup>66</sup> *Id.* (citing Paul J. Hibbard et al., Analysis Group, "The Economic Impacts of the Regional Greenhouse Gas Initiative on Ten Northeast and Mid-Atlantic States" 7 (Nov. 15, 2011), available at [http://www.analysisgroup.com/uploadedFiles/Publishing/Articles/Economic\\_Impact\\_RGGI\\_Report.pdf](http://www.analysisgroup.com/uploadedFiles/Publishing/Articles/Economic_Impact_RGGI_Report.pdf)).

<sup>67</sup> Air Resources Board, California Environmental Protection Agency, "Cap-and-Trade Auction Proceeds" (last reviewed Dec. 11, 2014), <http://www.arb.ca.gov/cc/capandtrade/auctionproceeds/auctionproceeds.htm>; see also 2006 Cal. Stat. ch. 488, *codified at* Cal. Health & Safety Code §§ 38500 et seq. (West 2014).

<sup>68</sup> Air Resources Board, *supra* note 67.

<sup>69</sup> Air Resources Board, California Environmental Protection Agency, "Auction Proceeds Budget Appropriations" (last reviewed August 6, 2014), <http://www.arb.ca.gov/cc/capandtrade/auctionproceeds/budgetappropriations.htm>; Air Resources Board, "Cap-and-Trade Auction Proceeds," *supra* note 67.



compliance with the cap by a regulated entity in another system.<sup>70</sup> Among other requirements, linkage to the California system requires substantial parity and mutual enforceability of the two systems, as determined by the Governor.<sup>71</sup>

In December, 2013, Québec began GHG allowance auctions under its own cap-and-trade system.<sup>72</sup> After several years of work, California and Québec formally linked their cap-and-trade programs on January 1, 2014.<sup>73</sup> On November 25, 2014, the two held their first joint allowance auction, with a clearing price of \$12.10 per allowance.<sup>74</sup>

### **III. THE POTENTIAL BENEFITS OF A REGIONAL CAP-AND-TRADE PROGRAM**

The potential benefits of a regional cap and trade program are readily apparent. The structure of the electric generating industry naturally lends itself to a regional, rather than state-by-state, approach to reducing carbon emissions. The U.S. power grid is structured to capture economic and reliability benefits by connecting many suppliers and consumers over very long distances, in pools mostly spanning multiple states. For the same reasons that this regional system creates economies of scale in the generation and transmission of electricity, it would also likely support efficiency in reducing the resulting carbon emissions.

#### **A. The Clean Power Plan overcomes the Constitutional barriers that likely would have prevented the WCI**

As discussed above, the WCI likely would have run afoul of one or more provisions of the U.S. Constitution designed to protect against state encroachment into areas of authority reserved to the federal government. Now, with the Clean Power Plan, those Constitutional barriers are almost certainly swept away, thanks to the imprimatur of federal authority based on the Clean Air Act.<sup>75</sup>

The critical remaining question is whether the Clean Power Plan is within the scope of EPA's statutory authority under the Clean Air Act. That question, which is beyond the scope of this article, will inevitably be decided by the U.S. Supreme Court, but probably not until 2018 or 2019, well after state and/or regional implementation plans must be submitted to EPA for approval. To make matters more complicated, the current demographics of the Court suggest

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<sup>70</sup> See Air Resources Board, California Environmental Protection Agency, "Linkage" (last reviewed Nov. 7, 2013), <http://www.arb.ca.gov/cc/capandtrade/linkage/linkage.htm>; see also Cal. Code Regs. Title 17, §§ 95940-95943 (2014) (linkage regulations).

<sup>71</sup> See generally Cal. Gov't Code § 12894(f) (West 2014).

<sup>72</sup> California Air Resources Board, Release No. 14-69 "California and Quebec Announce First Joint Cap-and-Trade Auction" (Sept. 18, 2014), available at <http://www.arb.ca.gov/newsrel/newsrelease.php?id=657>.

<sup>73</sup> *Id.*

<sup>74</sup> Air Resources Board, California Environmental Protection Agency, "California Cap-and-Trade Program and Québec Cap-and-Trade System November 2014 Joint Auction #1 Summary Results Report" (Dec. 3, 2014), available at [http://www.arb.ca.gov/cc/capandtrade/auction/nov-2014/summary\\_results\\_report.pdf](http://www.arb.ca.gov/cc/capandtrade/auction/nov-2014/summary_results_report.pdf).

<sup>75</sup> Opponents of the Clean Power Plan will nevertheless bring other Constitution-based challenges. One commentator has suggested the little-used doctrines against federal "commandeering," "entrenchment," and "coercion" of state police powers. See generally Scott C. Oostdyk, "A Constitutional Challenge to EPA's 'Clean Power Plan,'" *Law360* (Oct. 27, 2014), <http://www.law360.com/articles/590762/a-constitutional-challenge-to-epa-s-clean-power-plan>.

that the outcome of that case may turn on the 2016 Presidential election. Thus, as a practical matter, unless states opposed to the Clean Power Plan are willing to gamble on those events, they will need to engage in the compliance process for at least the next several years.

**B. The interstate transmission grid has created markets that are inherently regional, thereby facilitating environmental dispatch and the integration of renewables**

The interstate transmission grid grew with reliability<sup>76</sup> and economic efficiency as primary goals.<sup>77</sup> Two highly interconnected regional grids, the western and eastern interconnections, serve most of the continental U.S., with most of Texas served by a separate, smaller interconnection.<sup>78</sup> Administratively, reliability in the continental U.S. is governed by eight reliability councils under the oversight of the North American Energy Reliability Council (NERC), which in turn operates under the oversight of the Federal Energy Regulatory Commission (FERC). Six of the councils (all but Florida and Texas) span state borders, and three cross national borders to include all of Canada's ten provinces and small areas of Mexico.<sup>79</sup>

Today's markets for power production and transmission follow the physical infrastructure. Dispatch is primarily driven by variable costs,<sup>80</sup> and the interstate nature of the system has been central to keeping costs low while maintaining reliability.<sup>81</sup> Environmental regulations, too, often conform to the physical infrastructure. EPA notes that "state governments and the federal government have repeatedly taken advantage of the integrated nature of the electricity system when designing programs to allow the industry to meet pollution control objectives in a least-cost manner."<sup>82</sup>

The Clean Power Plan cannot succeed without the effective use of these existing regional grids, and may well depend on their expansion. Without a robust transmission grid, redispatch in favor of gas-fired power plants (building block 2) will be hampered, as will integration of wind and solar resources located in rural areas (building block 3). Moreover, cap-and-trade will help internalize the full environmental costs of generation, leading to more economically efficient dispatch over a broad geographic area, much like the role played by the existing acid rain cap and trade program.<sup>83</sup>

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<sup>76</sup> See Clean Power Plan, *supra* note 2, at 34880.

<sup>77</sup> U.S. Energy Information Administration, "Energy in Brief" (Sept. 16, 2014), [http://www.eia.gov/energy\\_in\\_brief/article/power\\_grid.cfm](http://www.eia.gov/energy_in_brief/article/power_grid.cfm).

<sup>78</sup> *Id.* Quebec also has its own interconnection, which does not enter the United States. *Id.*

<sup>79</sup> See NERC, "Regional Entities," <http://www.nerc.com/aboutnerc/keyplayers/pages/regional-entities.aspx> (accessed Dec. 19, 2014).

<sup>80</sup> U.S. Energy Information Administration, "Electric Generator Dispatch Depends on System Demand and the Relative Cost of Operation," *Today in Energy* (Aug. 17, 2012), <http://www.eia.gov/todayinenergy/detail.cfm?id=7590>.

<sup>81</sup> Clean Power Plan, *supra* note 2, at 34880.

<sup>82</sup> *Id.* The same integrated nature of the electricity system may also impede attempts at regulation by individual states. See *North Dakota v. Heydinger*, 15 F. Supp. 2d 891, 897 (D. Minn. 2014) (striking down state prohibition on importation of power that would contribute to carbon dioxide emissions as an extraterritorial regulation impermissible under the Dormant Commerce Clause).

<sup>83</sup> See Clean Power Plan, *supra* note 2, at 34880.

### C. States with different emission profiles and reduction opportunities can share the benefits of least-cost solutions

States currently have very different profiles in terms of both emissions and reduction opportunities, thereby creating opportunities to work together. For example, states that have achieved less in the way of cost-effective energy efficiency could receive funding and/or technical assistance from states that have implemented more of their energy efficiency measures, thereby picking up all of the region's low-hanging energy efficiency fruit.

The data underlying the Clean Power Plan suggests striking examples of these opportunities. Currently, the lowest NGCC emission rate of any state is 766 lb. CO<sub>2</sub>/MWh.<sup>84</sup> Emission rates for oil, other gas, and coal generation are even higher—no state has an existing coal emission rate of less than 2,000 lb./MWh.<sup>85</sup> Yet EPA's proposed final goals under the Clean Power Plan would require 15 states to meet average emission rates of less than 750 lb./MWh for *all* existing fossil-fuel EGUs by 2030.<sup>86</sup> These goals (and possibly those of many other states) are impossible using only “inside-the-fence” controls. Consequently, states will need access to the broadest possible pool of “outside-the-fence” opportunities if they are to meet their obligations as inexpensively as possible, including opportunities to redispatch from coal to NGCC generating facilities, to add renewable generation, and to implement energy efficiency. A regional cap and trade program, like RGGI, would help achieve this end.

For example, Montana produces over 14 million MWh of coal-based electricity per year at one of the nation's highest emission rates: 2,438 lb./MWh.<sup>87</sup> But Montana has no NGCC capacity to which to transition this coal power under building block 2,<sup>88</sup> and its population of barely one million<sup>89</sup> limits the amount of coal-fired power it can avoid through end-use efficiency under building block 4. Consequently, Montana has the second-highest final 2030 emission rate goal, at 1,771 lb./MWh. In contrast, Washington, which derives most of its power from hydroelectricity, has the lowest 2030 final goal, at just 215 lb./MWh. But Washington also consumes much of the coal-fired energy produced in Montana, utilizes its NGCC plants at just 19% of their capacity,<sup>90</sup> and has a relatively large population of nearly seven million power consumers.<sup>91</sup>

These differences create opportunities for economic efficiency. For example, it may be cost-effective to reduce carbon emissions in Montana by enhancing NGCC utilization and/or end-use energy efficiency in Washington. Or it might be cheaper to reduce Washington's carbon emissions by integrating more wind and solar power generated in Montana. In either case, the two states would benefit, not only from an environmental perspective but also economically, by

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<sup>84</sup> See EPA, “Proposed Emission Rate-Based CO<sub>2</sub> Goals and Illustrative Mass-Based Equivalents” (Nov. 2014) [hereinafter “translation spreadsheet”] (column C gives historic NGCC emission rates by state).

<sup>85</sup> See *id.* (columns B and D).

<sup>86</sup> See Clean Power Plan Table 1, *supra* note 2 at 34957–58.

<sup>87</sup> See EPA, translation spreadsheet, *supra* note 84 (column B).

<sup>88</sup> *Id.*

<sup>89</sup> U.S. Census 2013 estimate, <http://quickfacts.census.gov/qfd/states/30000.html>.

<sup>90</sup> See EPA, translation spreadsheet, *supra* note 84 (cell R53). This low utilization figure is partially due to the fact that the Pacific Northwest enjoyed high levels of hydroelectric production in 2012, EPA's baseline year.

<sup>91</sup> *Id.* (column BB).

combining their Clean Power Plan obligations and opportunities and then jointly pursuing a least-cost path.

**D. A regional approach would help avoid debate over credit for emissions reductions**

If each state pursues its own program alone, disputes will inevitably arise as to whether the benefits of a project should be credited to the state in which the project is located or the state in which the resulting energy is consumed; the easiest example would be a new renewable generating project.<sup>92</sup> These disputes will increase costs, distort market incentives, and in extreme cases stop projects that would otherwise be economically and environmentally desirable. A regional cap-and-trade regime would reduce these barriers by removing the need for individual generators to claim credit for specific reduction measures. Instead, the owner of each affected EGU in the region would have the opportunity to benefit from low-cost abatement through the purchase of auctioned allowances.

**IV. THE POTENTIAL BARRIERS TO A REGIONAL CAP-AND-TRADE PROGRAM**

In addition to the many benefits of a regional cap and trade program, there are also many barriers to be surmounted. This section identifies the most significant.

**A. Political differences among the states**

The most obvious barrier to a regional cap and trade program would arise if one or more key states chose to express their political opposition to the Clean Power Plan by refusing to submit a SIP. If that were to happen, or if EPA rejects a state's proposed SIP, EPA would then implement a federal plan (FIP) with the same elements required for a SIP.<sup>93</sup> The FIP would be "an interim action and will be automatically withdrawn" when a SIP is approved.<sup>94</sup> Much like the demise of WCI, states' refusal to participate actively in regional cap-and-trade programs would weaken cap-and-trade systems by limiting the available pool of options for efficient emission reductions and the capital available to finance them.

**B. Potential need for state legislation authorizing participation in a regional organization**

Do state clean air regulators have sufficient authority under existing state law to comply with the Clean Power Plan by implementing a regional cap and trade program? This question is critical, because the political challenge of enacting new legislation is often far greater than promulgating new agency regulations. Each state varies in its administrative structures and authorizations, so the question really requires fifty separate answers, many of which may turn on undecided questions of state law. The following sections illustrate the challenges with a

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<sup>92</sup> See, e.g., Clean Power Plan, *supra* note 2, at 34913 (discussion of avoiding double-counting benefits of new renewables), 34922 (multi-state plan covering contiguous grid region would not require any attribution of demand-side efficiency improvements).

<sup>93</sup> FR at 34951, proposed rule at § 60.5720; CAA § 111(d)(2)(A).

<sup>94</sup> FR at 34951, proposed rule at § 60.5720.

discussion of the RGGI states' approaches to authorizing that system, followed by a brief, preliminary analysis of the relevant statutes in several western states.

## **1. State legislation to implement RGGI**

In assessing the potential need for new state legislation to implement a regional approach under the Clean Power Plan, it is useful to review the state legislation that supports RGGI. Nine of the 10 current and former RGGI states enacted legislation authorizing and/or requiring state participation in RGGI.<sup>95</sup> New York is the lone outlier; instead of adopting new authorizing legislation, its environmental agency relied on broad, existing statutory authority as the basis for adopting regulations implementing RGGI. Two lawsuits have attempted to challenge the sufficiency of that authority. In *Thrun v. Cuomo*,<sup>96</sup> the only relevant claims sought declaratory relief, and were dismissed on the ground that the four-month statute of limitations for challenges to quasi-legislative action had run. The other case, *Indeck Corinth, L.P. v. Paterson*,<sup>97</sup> settled before the court decided any of the relevant issues. Thus, the courts have not reached the merits of the issue, and *Thrun* suggests that it may be too late for any plaintiff to do so.

## **2. State legislation to implement the Clean Power Plan through a regional cap and trade program**

### **a. Washington**

In Washington, the question of the breadth of existing state authority is not merely academic. Governor Jay Inslee, a longtime advocate of climate change regulation, recently proposed the “Carbon Pollution Accountability Act of 2015,” which would limit GHG emissions from the state’s major emitters through a cap-and-trade system.<sup>98</sup> But the legislature is not supportive: the day of Inslee’s announcement, the chair of the state Senate energy committee responded that the Governor “seems to not get enough tax increases. . . . An energy tax is really a tax on mobility and a tax on freedom. . . . That’s going to be a hard one.”<sup>99</sup> If Governor Inslee cannot persuade the legislature, Washington’s ability to comply with the Clean Power Plan through a regional cap and trade program could live or die on the breadth of existing state agency authority.

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<sup>95</sup> See Conn. Gen. Stat. §22a-200c (2014); 7 Del. Code §§ 6043–6047 (2014); 38 Maine Rev. Stat. §§ 579–580-C (2014); Mass. Gen. L. 21A § 22 (2014); N.H. Rev. Stat § 125-O:19–29 (2014); N.J. Stat. 26:2C-45, 47 (2014); R.I. Gen. L. 1956 §§ 23-82-1–23-82-7 (2014); 30 Vt. Stat. § 255 (2014). Unlike the other states, Maryland adopted legislation directing the Governor to “include the State as a full participant” in RGGI, but not explicitly adding to the authority of the Department of the Environment. Md. Code, Env’t, § 2-1002(g) (2014). The Department has relied on this and on pre-existing, broad statutory grants in its rules implementing RGGI. See, e.g., 35-8 Md. Reg. 832, 832 (2008) (citing *id.* §§ 1-101, 1-404, 2-103, and 2-1002(g) as authority for CO<sub>2</sub> allowance auctions).

<sup>96</sup> 112 A.D.3d 1038 (2013).

<sup>97</sup> Sup. Ct. N.Y., Albany, Index No. 5280-09

<sup>98</sup> See Jay Inslee, Policy Brief, “Carbon Pollution Accountability Act of 2015” 3 (Dec. 2014), available at [http://www.governor.wa.gov/issues/climate/documents/Carbon\\_market\\_policy.pdf](http://www.governor.wa.gov/issues/climate/documents/Carbon_market_policy.pdf).

<sup>99</sup> Brad Shannon, “Gov. Inslee Proposes a Carbon-Pollution Cap and Trade System to Raise \$1 Billion a Year,” *The Olympian* (Dec. 17, 2014), available at [http://www.theolympian.com/2014/12/17/3483414\\_gov-inslee-proposes-a-carbon-pollution.html?sp=/99/101/112/123/118/&rh=1](http://www.theolympian.com/2014/12/17/3483414_gov-inslee-proposes-a-carbon-pollution.html?sp=/99/101/112/123/118/&rh=1).

The responsibility for environmental regulation in Washington falls primarily on the Department of Ecology (Ecology). Its air pollution authority is worded rather broadly: “If [Ecology] finds . . . that the emissions from a particular type or class of air contaminant source should be regulated on a statewide basis in the public interest and for the protection of the welfare of the citizens of the state, it may adopt and enforce rules to control and/or prevent the emission of air contaminants from such source.”<sup>100</sup> This statutory grant of authority has not been interpreted in any reported cases, but from it Ecology might argue that it can “adopt and enforce” a cap-and-trade system in order to limit GHG emissions from any “particular type or class” of source, not necessarily limited to power plants.<sup>101</sup>

However, this broad authority may be constrained by legislation enacted in 2008, against the backdrop of the WCI effort. At that time, the Washington Legislature adopted aggressive emissions reduction goals, but it also stated its intent that “[i]n the event the state elects to participate in a **regional multisector market-based system**, it is the intent of the legislature that the system will become effective . . . **after authority is provided to [Ecology] for its implementation.**”<sup>102</sup>

This statute could be read as prohibiting Washington’s participation in a regional cap and trade system without additional legislative authorization. But there are at least three arguments why this language might not constitute a complete bar. First, the language is in the intent section of the legislation, suggesting that it may not have the force of law. Second, the language refers only to “multisector” emission reduction systems, at least implying that a single-sector cap and trade program would be permissible. Assuming that power generation is a single sector, a cap-and-trade system that included only building blocks 1, 2, and 3 might not conflict with the statute. However, end-use efficiency most likely does not fall within the power generation sector, which would eliminate building block 4. In addition, the statute might prevent Ecology from linking Washington with a multisector cap-and-trade program in another state, such as California.

Finally, the 2008 legislation contains a savings clause regarding Ecology’s existing authority: “Except where explicitly stated otherwise, nothing in [the 2008 emission reduction bill] alters or limits any authorities of [Ecology] as they existed prior to June 12, 2008.”<sup>103</sup> Thus, the language in the intent section seems unlikely to have affected Ecology’s arguably broad pre-2008 authority to implement the Clean Air Act. Nevertheless, any attempt by Governor Inslee to move ahead with a regional cap and trade system without new authorizing legislation would almost certainly result in prolonged litigation.

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<sup>100</sup> 70 Wash. Rev. Code § 70.94.395 (2014). Ecology has promulgated a definition of “greenhouse gases” that exactly mirrors the EPA definition. Wash. Admin. Code § 173-400-030(42) (2014).

<sup>101</sup> By rule, Ecology has limited regulation of GHG emissions in Washington to sources emitting at least 100,000 tons of carbon dioxide equivalent per year, but that limitation could be changed by administrative rulemaking and would not require legislative action. Wash. Admin. Code § 173-401-200(35)(a) (2014).

<sup>102</sup> Wash. Rev. Code § 70.235.005(4) (2014) (emphasis added).

<sup>103</sup> Wash. Rev. Code § 70.235.900 (2014).

## **b. Oregon**

The Oregon legislature has granted the Environmental Quality Commission (the policy and rulemaking arm of the Oregon Department of Environmental Quality) authority to “require permits for air contamination sources classified by type of air contaminants, by type of air contamination source or by area of the state.”<sup>104</sup> As in Washington, it does not appear that the breadth of this authorization has been tested in any reported court opinion. Permits must include “the conditions for compliance with the rules and standards” adopted pursuant to the commission’s authority.<sup>105</sup>

The commission may also “classify air contamination sources according to levels and types of emissions and other characteristics” and “may require registration or reporting or both for any such class or classes.”<sup>106</sup> Under this authority, the commission has already implemented a system of mandatory GHG reporting<sup>107</sup> covering the same six gases as the EPA definition.<sup>108</sup> The reference in the permit statute to “classified” sources appears to refer to sources—like GHGs—classified according to the reporting statute. Regardless, the similarity in language between the statutory authorization for mandatory reporting and for permitting suggests that the Department of Environmental Quality’s existing authority may support regulation of GHG emissions as required by the Clean Power Plan.

To date, the Oregon agencies have shown no inclination to adopt a cap and trade program without specific legislative authority. Moving tentatively in a different direction, in 2013 the legislature enacted Senate Bill 306, which appropriated \$200,000 to evaluate a carbon tax. On December 8, 2014, the Oregon Legislative Revenue Office released a report on the economic and emissions impacts of a carbon tax in the state. The report, prepared by the Northwest Economic Research Center at Portland State University, modeled a range of scenarios and concluded that a carbon tax could be effective at reducing GHGs without having an adverse effect on the state’s economy.

Based on that study, a carbon tax bill may be introduced in the 2015 Oregon legislative session, but its chances of success are not clear. First, although Democrats control both houses of the legislature, there still is concern about adding a new tax, unless the tax would be revenue neutral. Second, the environmental community continues to prefer a cap and trade approach. If Washington adopts cap and trade, the potential regional advantages involving Washington and California could lead Oregon legislators to consider that policy instead of a carbon tax.

## **c. California**

As described above, California has already implemented an extensive cap-and-trade system pursuant to AB 32, and has linked its system and held a joint allowance auction with Quebec. Its authority for a multi-state partnership under the Clean Power Plan is not in doubt, highlighting the advantages of clear legislative action where feasible.

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<sup>104</sup> Or. Rev. Stat. § 468A.040(1) (2014).

<sup>105</sup> Or. Rev. Stat. § 468.065(1) (2014).

<sup>106</sup> Or. Rev. Stat. § 468A.050(1) (2014).

<sup>107</sup> See Or. Admin R. 340-215-0010 to -0060 (2014).

<sup>108</sup> Or. Admin R. 340-200-0020(61)(a) (2014).

#### **d. Idaho**

Idaho's legislature has authorized its Department of Environmental Quality to adopt and enforce "rules as may be necessary to deal with problems related to . . . air pollution."<sup>109</sup> The relevant section goes on to specify the director's powers, under the board's rules, to issue permits under Title V of the federal Clean Air Act,<sup>110</sup> but also to supervise and administer "a system to safeguard air quality and for limiting and controlling the emissions of air contaminants."<sup>111</sup> No reported cases have interpreted this language.

Idaho has incorporated by reference EPA's definition of greenhouse gases as an air pollutant into its Clean Air Act Title V permitting program,<sup>112</sup> but has no regulations of its own governing GHGs.<sup>113</sup> It is also one of a minority of states which has not enacted a renewable portfolio standard for its electric utilities.<sup>114</sup> Nevertheless, the broad wording of Idaho's authorizing statute may, as a matter of law, allow participation in a regional cap-and-trade program without further legislative action. However, it appears unlikely at this time that the administration of Governor Otter is inclined to move in that direction as a matter of policy.

#### **e. Montana**

Montana's Clean Air Act<sup>115</sup> entrusts the state's board of environmental review with rulemaking under the Act.<sup>116</sup> The only component of this enactment conceivably broad enough to authorize a multi-state cap-and-trade system under the Clean Power Plan is the board's rulemaking authority "for the administration, implementation, and enforcement of this chapter."<sup>117</sup> However, the chapter's authorization with respect to air pollutant emissions appears to extend only to classification and reporting of emissions,<sup>118</sup> establishment of ambient air quality standards,<sup>119</sup> and establishment of "limitations of the levels, concentrations, or quantities

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<sup>109</sup> Idaho Code Ann. § 39-105(2) (West 2014) ("The director shall . . . formulate and recommend to the board, rules as may be necessary to deal with problems related to . . . air pollution, . . . which shall, upon adoption by the board, have the force of the law relating to any purpose which may be necessary and feasible for enforcing the provisions of this act, including, but not limited to, the prevention, control or abatement of environmental pollution or degradation . . . and risks to public health related to any of the powers and duties described in this section.").

<sup>110</sup> See Idaho Code Ann. § 39-105(3)(a) (West 2014).

<sup>111</sup> Idaho Code Ann. § 39-105(3)(d) (West 2014).

<sup>112</sup> Idaho Admin. Code § 58.01.01.008.11 (West 2014) (incorporating by reference 40 C.F.R. 70).

<sup>113</sup> See Idaho Admin. Code § 58.01.01 (West 2014).

<sup>114</sup> See EPA AgSTAR program, "Renewable Portfolio Standards" (Updated Aug. 5, 2014), <http://www.epa.gov/agstar/tools/funding/renewable.html>.

<sup>115</sup> Mont. Code Ann. § 75-2 (West 2014).

<sup>116</sup> Mont. Code Ann. § 75-2-111(1) (West 2014).

<sup>117</sup> *Id.* The statute gives the board rulemaking authority in only two other areas, neither of them sufficient to support participation in a multi-state cap-and-trade system. These areas are primary nonferrous smelter orders under 42 U.S.C. § 7419 and penalties for CAA noncompliance by stationary sources under 42 U.S.C. § 7420. *Id.*

<sup>118</sup> Mont. Code Ann. § 75-2-201(1) (West 2014).

<sup>119</sup> Mont. Code Ann. § 75-2-202(1) (West 2014). This power is probably unhelpful because GHGs are well mixed in the troposphere, so that local and regional emissions rates are not closely linked with ambient concentrations.



of emissions of various pollutants from any source necessary to prevent, abate, or control air pollution.”<sup>120</sup>

Though fairly broad, this authorization might still constrain Montana’s participation in a regional cap-and-trade system under the Clean Power Plan. The authority to establish “limitations” on emissions from “sources” appears to be narrower than EPA’s asserted authority under CAA Section 111(d) to adopt “standards of performance” incorporating the “best system of emission reduction,” where “system” extends well beyond the physical plant and operations of individual sources.<sup>121</sup> Specifically, building blocks 3 (renewables) and 4 (end user efficiency) may be beyond the reach of the Montana board’s authority because they are not sources of emissions. The Montana board’s existing authority thus may not support participation in a regional cap-and-trade system that utilizes all four building blocks. If not, further legislation would be needed before Montana could fully participate in such a system.

### **C. The challenge of state agencies effectively administering a regional system**

The successful implementation of a regional cap-and-trade program would require a high level of cooperation among state agencies, both within each state, and across states. Within each state, environmental agencies traditionally regulate air emissions with little regard for economics, while state public utility commissions (PUCs) focus primarily on economic efficiency and rate setting. Mostly, these very different bodies go about their work with little interaction, much less cooperation.

These siloes will need to be breached. Although state environmental agencies will have the lead role in drafting and implementing SIPs, they cannot do so effectively without close coordination with PUCs. For example, if PUCs do not allow uniform recovery of costs incurred by utilities in the course of complying with a cap-and-trade program, those utilities will soon find themselves in an untenable, and unfair, position.

Similarly, coordination and cooperation across state lines will need to substantially increase. Among environmental agencies, enforcement parity will be necessary in order to avoid real or perceived shifting of compliance burdens across state lines. In addition to the economic unfairness of such shifts, those states with strong enforcement programs may perceive lax enforcement by other states as creating legal liability for the entire regional program, particularly if EPA holds each member state responsible for achieving the regional goals. A dispute resolution process may be necessary to deal with these scenarios. Coordination among PUCs will also be essential with respect to utilities doing business in more than one state within a regional program. For example, if the ratemaking treatment of costs incurred with respect to emission allowances is substantially inconsistent, the liquidity of the regional allowance market may become impaired.

Although agency coordination will be challenging, the experience of RGGI shows that a large multi-state group can overcome administrative and political differences to agree on enough aspects of a cap-and-trade system to allow broad linkage.

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<sup>120</sup> Mont. Code Ann. § 75-2-203(1) (West 2014).

<sup>121</sup> See 42 U.S.C. § 7411(a)(1), (d) (2014).

**D. States assigned a less stringent goal may be reluctant to partner with other states**

If a state believes its EPA-established goal is relatively lenient, it may hesitate to join a regional system, even though it should be able to capture much of the benefit of its less stringent goal through the regional system. For example, a state with a small number of affected EGUs might perceive that the transaction costs of joining a regional system outweigh the benefits, especially if the state is well-positioned to meet its goal without outside help.

**E. Conflicting state statutes may impede the incorporation of renewables into regional programs**

The majority of states have adopted some form of renewable portfolio standard (RPS) that requires utilities to include a specified proportion of renewable energy in their power production or purchasing.<sup>122</sup> The resulting renewable energy certificates (RECs) are transferable, much like CO<sub>2</sub> allowances. Thus, it would be beneficial to incorporate RECs into a regional cap and trade program in some form.

However, state RPS statutes currently vary in ways that impair the liquidity of REC trading. Among other things, states differ as to the definition of “renewable,” and as to the extent to which out-of-state RECs can be used for compliance purposes. Some state REC registries have developed standards for interchange, and more such standards are in development.<sup>123</sup>

EPA is receptive to the idea of using RECs in Clean Power Plan compliance,<sup>124</sup> concluding that existing REC tracking systems “generally provide a solid foundation” for minimum quantification, monitoring, and verification requirements for SIPs.<sup>125</sup> However, because CO<sub>2</sub> emissions reduction is generally a co-benefit of RPSs, rather than the focus, “additional information and reporting may be necessary to accurately quantify the avoided CO<sub>2</sub> emissions associated with the renewable energy generated through an RPS . . . included in a state plan.”<sup>126</sup>

At a minimum, any REC sold for 111(d) compliance would need to be tracked with respect to its associated carbon emissions rate, and a given REC might not be allowable for compliance in all participating states. One option would be to create consistent parameters for the creation and use of RECs, thereby making them fully fungible within a regional program. This would, however, require the member states to enact uniform RPS legislation.

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<sup>122</sup> For a thorough, if somewhat outdated, survey of states RPSs, see Christine Beaulieu, Public Power Council, “PPC Summary of State Renewable Portfolio Standards (RPS)” (July 2007), available at <http://www.ppcpx.org/documents/PPCRPSStateSummaries07.doc>.

<sup>123</sup> See EPA, Office of Air and Radiation, technical support document, “State Plan Considerations,” docket ID no. EPA-HQ-OAR-2013-0602 at 68 (June 2014), available at <http://www2.epa.gov/carbon-pollution-standards/clean-power-plan-proposed-rule-state-plan-considerations> (citing <http://www.narecs.com/resources/registries>).

<sup>124</sup> See *id.* at 60–69.

<sup>125</sup> *Id.* at 72.

<sup>126</sup> *Id.* at 73. EPA goes on to discuss specific informational requirements for Clean Power Plan compliance. *Id.* at 72–73.

## V. A PATH FORWARD

Now that comments on the draft regulation have been submitted and EPA is preparing its final rule, states and other stakeholders should turn their attention to assessing the potential advantages of a regional approach. This process should initially be led by the governors, with policy advice and technical support from their respective environmental agencies and public utilities commissions (PUCs). In some regions, an existing organization may provide a vehicle for initiating discussions. For example, potential convening organizations in the west include the Western Governors' Association, the Northwest Power Planning Council, and the Western Interstate Energy Board. National organizations that could serve as a forum include the National Association of Regulatory Utility Commissioners (NARUC) and the Environmental Council of the States (ECOS).

### A. Identify a sensible grouping of states

The logical first step is to identify a grouping of states that is likely to be better off acting together under Section 111(d) than acting individually. This step has at least two components: political/institutional and economic.

#### 1. Political/Institutional

Based on the meltdown of the WCI, it may be tempting to conclude that states should form groups based largely, if not entirely, on political alignment. That view, however, overlooks at least three changes since the days of WCI. First, WCI was strictly voluntary, allowing new governors to simply pull out of the agreement. Under EPA's mandatory program, the choice for each state is very different: is it better to attempt compliance alone, or is it better to share that responsibility with other partners?

Second, RGGI and California have demonstrated to the satisfaction of most that cap and trade programs can generate substantial revenues without harming economic growth. For states faced with budget shortfalls, even those states skeptical about the need for climate change regulation, this may change the political calculus that prevailed only a few years ago.

Third, EPA's role in defining and overseeing compliance is likely to continue for the foreseeable future, through many changes of administration. This process will be extraordinarily dynamic as EPA feels its way through largely uncharted waters, buffeted by Congress and FERC, not to mention litigation. In that context, a bipartisan group of states may have certain advantages over a group or an individual state that is seen as wedded to one camp or the other. Not only is it likely to receive more deference from EPA on any number of discretionary determinations, but it will be in a stronger position to protect its interests when, at some point down the road, Congress is actually able to legislate on this topic.

Rather than focusing entirely on political alignment, states should analyze existing interstate agreements that may provide an institutional framework for collaboration. For example, Washington, Oregon, Idaho, and Montana have worked together on energy issues for almost 35 years under the Pacific Northwest Electric Power Planning and Conservation Act of 1980, by which Congress authorized those states to form the Northwest Power and Conservation

Council. Among other things, the Council has led a highly successful regional effort to improve energy efficiency, the centerpiece of the Clean Power Plan's building block 4.

Although there is certainly no legal requirement that there be a pre-existing regional organization, or even that a group of states be contiguous, states with a history of formal or even informal institutional ties on related topics will likely be better off than those that do not. Those ties, including the resulting personal relationships, will promote better collaboration among state agencies as they undertake to create a regional plan.

## **2. Economic**

No regional approach can succeed unless it produces economic benefits in excess of a go-it-alone approach. This article assumes that a regional approach to reducing emissions is more cost-effective than a state-by-state approach.<sup>127</sup> If basic economic principles apply, a larger pool of emission reduction opportunities and sources of capital should result in greater efficiency. Similarly, administrative burdens and transaction costs should be less on a regional basis, measured either on a per-megawatt hour or per capita basis. But these are big assumptions, and states considering a regional approach should first address this threshold economic question to assure that their grouping of states is indeed better off together.

In doing so, stakeholders need to closely examine the mutual benefits that may result from the differences in their present circumstances. Specifically, states with very different emission profiles, or very different emission reduction opportunities, should be able to leverage those differences in ways that provide mutual benefit. In other words, any time a ton of emissions can be avoided in one state more economically than in a partner state creates an opportunity to share those benefits. The same can be said where it is more economical to develop renewables in one state versus another, or where one state has more energy efficiency opportunities than its neighbor. By monetizing these differences in the form of allowances, the most cost-effective measures will be implemented without regard to the state in which they are located, thereby benefiting the entire region.

### **B. Develop a regional MOU**

Once a suitable group has been identified, the second step is to draft a memorandum of understanding (MOU) to guide the development of a regional plan that will meet with EPA approval.<sup>128</sup> A key provision of an MOU will be a commitment by each state to ascertain that it has the legal authority to participate in a regional cap and trade program. As outlined above, satisfying this commitment may be challenging in states where such authority is either inadequate or uncertain. Uniform state enabling legislation would assure that each state has the same scope of authority, but that may not be possible in the current political environment.

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<sup>127</sup> This assumption is consistent with EPA's cost-benefit analysis for the Clean Power Plan. Clean Power Plan, *supra* note 2, at 34839-41. EPA also notes other areas of pollution control in which market solutions have been applied to the electricity system in order to reach least-cost solutions. *Id.* at 34880.

<sup>128</sup> RGGI MOU and amendments are available at: <http://rggi.org/design/history/mou>.

An MOU will also need to address program design. Among other things, it will need to establish a regional cap sufficient to meet the cumulative EPA-established goals for the member states, and then allocate among the member states responsibility for meeting that cap. It will also need to address compliance periods, auction procedures, “safety valve” pricing mechanisms, banking, offset opportunities, and the role of RECs, if any. It should also address the allocation of resulting revenues, which will be substantial if the experience of RGGI and California is any guide.

Perhaps the most challenging issue will be that of program administration. Is a new, independent regional entity necessary, or can the program be administered on a less formal basis? If a new entity is chosen, who leads it, who sits on the governing body, and how much state authority is delegated to it? If the less formal approach is taken, how would it hold a state accountable for meeting its obligations? In addition, the program administrator will need to engage with FERC regarding the operation of wholesale power markets, and with NERC regarding reliability.

## **VI. CONCLUSION**

EPA’s Clean Power Plan imposes daunting requirements, but also affords opportunities for unprecedented levels of cooperation and coordination on a regional basis. Despite the failure of the WCI, the success of RGGI demonstrates that regional cap and trade programs can and do work. By learning from these prior efforts and leveraging the existing economies of scale of the wholesale transmission system, states can minimize their costs by pooling their diverse portfolios of emissions, emission reduction opportunities, and sources of capital.