Why Climate Law Must Be Federal: The Clash between Commerce Clause Jurisprudence and State Greenhouse Gas Trading Systems

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Response

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Absent Federal legislation or leadership on regulatory responses to greenhouse gas ("GHG")-based climate problems, the states have sought, either on their own or through regional agreements, to restrict the amount of GHG released by the electric power plants within their states. These systems are subject to "leakage," the ability of power providers to receive electricity from an "extra-regional" and hence unregulated source. While practical considerations may limit the immediate impact of leakage, in the long term, state-based systems perversely provide competitive advantages to unrestricted GHG-emitting power sources that do not have the burden of compliance. One logical avenue to address leakage would be to directly or indirectly ban or penalize the purchase of power from other sources. Prohibiting these solutions is the combination of the Supreme Court's dormant commerce clause analyses that prevents states from discriminating against identical goods based on origin. Most relevant and troubling is the West-Lynn Creamery case, which shows the Court's willingness to find unconstitutional purpose among several disparate statutory schemes if, in combination, their effect is to penalize an out-of-state supplier of identical goods. This Article reviews this line of reasoning and posits that this limitation is the ultimate rationale for a Federal response to GHG-based climate legislation.
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“IT IS ONE OF THE HAPPY INCIDENTS OF THE FEDERAL SYSTEM THAT A SINGLE COURAGEOUS STATE MAY, IF ITS CITIZENS CHOOSE, SERVE AS A LABORATORY; AND TRY NOVEL SOCIAL AND ECONOMIC EXPERIMENTS WITHOUT RISK TO THE REST OF THE COUNTRY.”\textsuperscript{1}

“[E]VEN IF ENVIRONMENTAL PRESERVATION WERE THE CENTRAL PURPOSE OF [A STATE’S] PRICING [LAW], THAT WOULD NOT BE SUFFICIENT TO UPHOLD A DISCRIMINATORY REGULATION.”\textsuperscript{2}

I. INTRODUCTION

Nature abhors a vacuum both in physical and social realms. Despite the Supreme Court’s April 2007 holding in Massachusetts v. E.P.A. that Greenhouse Gases (“GHGs”) emitted by automobiles are pollutants within the meaning of the Clean Air Act, the federal government has made no progress toward developing a national climate law.\textsuperscript{3} While the United States federal government has withdrawn from the international Greenhouse Gas (“GHG”) debate, state governments have been rapidly filling the void.\textsuperscript{4} Driven by an otherwise unaddressed public concern, the

\textsuperscript{1} New State Ice Co. v. Liebmann, 285 U.S. 262, 311 (1932) (Brandeis, J., dissenting).
\textsuperscript{2} West Lynn Creamery, Inc. v. Healy, 512 U.S. 186, 204 n.20 (1994).
\textsuperscript{3} “Because greenhouse gases fit well within the Clean Air Act’s capacious definition of ‘air pollutant,’ we hold that EPA has the statutory authority to regulate the emission of such gases from new motor vehicles.” Massachusetts v. Envtl. Prot. Agency, 127 S. Ct. 1438, 1462 (2007) [hereinafter Massachusetts v. EPA.]. Further evidencing a lack of quick federal action is the Massachusetts v. E.P.A. plaintiff-state’s seeking of a Writ of Mandamus to compel the EPA’s compliance with the Court’s ruling. For the April, 2008 writ, see Petition for Writ of Mandamus to Compel Compliance with Mandate, Massachusetts v. EPA., 127 S. Ct. 1438 (2007) (No. 03-1361), available at http://www.pewclimate.org/docUploads/Mass-v-EPA-Petition.pdf.
\textsuperscript{4} State-based activity has taken an international tenor. In October 2007, ten U.S. states joined with nine European-Union countries, the European Commission, two Canadian provinces, and others to form the International Carbon Action Partnership—a group that serves as a forum for those regulating CO\textsubscript{2} and other Greenhouse Gas emissions in fact or intent to share regulatory ideas and encourage regional trading systems. Press Release, Int’l Carbon Action P’ship, Nations, States,
last few years have seen a flurry of state government activity. Individual states, such as California, Connecticut, and others have adopted state-based GHG regulatory programs to limit their own state's emissions. But of interest to this Article are the constitutional implications involved when, as is now the case, the majority of the states create state-based, multi-state, or, in some cases, international trading regions for GHG emissions.

The environmental movement has produced many successes from ozone protection to cleaner water, but perhaps none of these was as exciting as the market trading solution employed to address acid rain. Realizing that power plants emitted the largest amounts of acid rain precursors, the federal government created caps and tradable permits to provide market-based incentives to reduce harmful emissions.

Seeking to build upon the market success of the past, several states, notably the Northeastern states, the Northwestern states (plus California), and certain Midwestern states have separately formed groups to explore creating state-based GHG trading regimes that concentrate on CO₂ emissions. Specifically, the New England states, New York, Pennsylvania, and others have bound themselves together through the Regional Greenhouse Gas Initiative ("RGGI") to form a GHG trading region—perhaps the most developed of all regional programs. Not to be left behind, in July of 2007, California, Arizona, and other states, along with some Canadian provinces, formed the Western Climate Initiative, a group with very similar goals. Covering yet more of the country, Illinois, Iowa, and other Midwestern states have created the Midwestern Accord, also in conjunction with Canadian provinces, to explore a GHG trading region.

All in all, some thirty-two states are either full members or official observers in a regional trading association.

These programs intend to use market-based initiatives and issue permits for the current level GHG emissions. Like acid rain, these permits would be tradable. But unlike the acid rain trading system for SO₂

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7 This Article considers the dormant Commerce Clause impact. For an insightful note on the Compact Clause considerations, please see generally Note, The Compact Clause and the Regional Greenhouse Gas Initiative, 120 HARV. L. REV. 1958 (2007).
emissions, these systems do not have national coverage. This regional construction presents fatal problems. What if a power distributor receives its supply not from an in-region entity which has reduced its CO₂ emissions or purchased emission certificates, but from an out-of-region, uncapped power generator? Since atmospheric CO₂, a dominant GHG, affects the whole globe, the environmental damage is identical as if that energy originated in the controlled region. This power importation from a non-capped area is frequently referred to as “leakage.”

This Article examines the constitutional limitations on state-based CO₂ trading programs when they attempt to arrest leakage through a variety of means. The Article concludes by discussing the wisdom of pursuing a state-based cap-and-trade agenda since the Dormant Commerce Clause analysis highlights the need for the development of Federal Climate Law.

II. THE PROBLEM AND POLICY OBJECTIVES OF CO₂ REGULATION

The 2001 Intergovernmental Panel of Climate Change (“IPCC”) Third Report states that CO₂ concentrations have grown thirty-one percent since 1750. CO₂ is one of several greenhouse gases that have been identified with global warming. In 2007, the Fourth Report of the IPCC notes that:

Eleven of the last twelve years (1995-2006) rank among the twelve warmest years in the instrumental record of global surface temperature (since 1850). The 100-year linear trend (1906-2005) of 0.74 [0.56 to 0.92]°C is larger than the corresponding trend of 0.6 [0.4 to 0.8]°C (1901-2000) given in the [Third Assessment Report].

The 2007 IPCC reports CO₂ emissions affect the planet without respect to boundaries. Emissions of long-lived greenhouse gases (i.e., CO₂, N₂O, PFCs, SF₆) have a lasting effect on atmospheric composition, radiative forcing, and climate.

Because of the long cycle effect of these gases, a unit of CO₂ emitted in Boston is equally destructive to Massachusetts (and the world) as a unit of CO₂ emitted either in Montana or Auckland. Emit anywhere and have the GHG problem everywhere.

This non-regional effect is significant when gauging the success of any cap-and-trade program. On a policy basis, any program, to be successful, must reduce net emissions. If a program were to simply shift emissions from one region to another, then it is not accomplishing any serious

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13 Id. at 36–39.
environmental objective. Conceivably, a program that merely relocates emissions might actually harm the environment by hiding the problem from a motivated electorate or by retarding more effective policy development.

III. \(\text{CO}_2\) CAP-AND-TRADE SYSTEMS

Generally, a GHG or \(\text{CO}_2\) cap-and-trade program first establishes the amount of gas currently released by a significant in-region emitter, typically a power plant. Permits then issue up to this amount or some other, similar formulaic limit. Many of the current regional proposals are in working groups and drafts, so it is impossible to list the definitive mechanics. However, the initial documents imply a strong likelihood that these would mirror the acid rain permitting system, but would critically be modified to work on a regional basis.

Market mechanisms successfully countered acid rain by providing market-based incentives to limit emissions. Emitters violating their "cap" pay a per-unit penalty. Emitters investing in technology and reducing their emissions found positive economic rewards by selling their excess permits through a trading mechanism.

However, for any cap-and-trade system to be workable, the system must define a market. From antitrust/market economics, a market for permits, by definition, would contain no real non-system substitutes. If the permits have substantial substitutes, there will be market failure. The value of the permits would be diluted by the substitutes’ prices. But, what would substitute for \(\text{CO}_2\) permits? Counterfeit permits are unlikely. A more likely culprit is power generated from an uncapped (or incompatibly capped) source and sold into the region. Should a power generator require

\[\text{Vol. 40:1431}\]
additional emissions under the program, they would have the option of: (1) becoming more efficient, perhaps through technological investment, to emit more power with less CO₂; (2) purchasing additional permits in the marketplace; (3) generating excess CO₂ at some pre-defined penalty price; or (4) arranging for the purchase of power from another supplier. Purchasing permits is a good result as is functions within the system and presumably those permits were liberated by some other company investing in CO₂-efficient technologies. However, when a power distributor chooses instead to purchase power through the grid which is supplied by an uncapped energy source, the entry of this uncapped power is referred to as “leakage.”

IV. LEAKAGE DEFINED AND STATE-PROPOSED SOLUTIONS

Leakage is the purchase of energy that originates from an uncapped, extra-regional source. It is also a serious issue for any cap-and-trade program. RGGI has formed an Ad Hoc Leakage working group and stakeholders have listed “account[ing] for and mitigat[ing] the likely increase in GHG and air emissions from electricity imports into the RGGI region as a result of regional CO₂ regulation (i.e. leakage)” as one of RGGI’s key goals.

Leakage is of limited practical problems in the short term. The “grid” can only deliver power up to its capacity. The current grid infrastructure is both expensive to upgrade and under intense scrutiny as to its capacity. Nevertheless, these limitations can change over time with the proper economic incentive.

Leakage risks undermine the goal of the RGGI program in two ways. First, any CO₂ emission reductions achieved in the RGGI region will be offset, as power is imported from surrounding areas that are not subject to CO₂ emission limits. Second, electricity imports will create a competitive disadvantage for companies in the RGGI region.

If it is more cost effective to buy power from uncapped regions than to

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18 “The issue of ‘leakage’ applies to both environmental and economic concerns. The term generally refers to the migration of emissions from a regulated to an unregulated geographic area (emissions leakage), but it also may refer to the related migration of economic activity (economic leakage).” AULISI ET AL., supra note 7, at 13.


buy new permits or pay penalties, this creates increased demand for uncapped power. As the uncapped power suppliers gain volume, they become more efficient, increasing their price advantage. Also, capped regions will likely have higher prices as they internalize the trading program’s costs, making them very attractive customers. There is a strong incentive for the uncapped power companies to deliver power to supply these regions through a power grid. These areas are also some of the most densely populated in the country, making them both the largest and most profitable. Over time, more and more excess power demand could be serviced by the uncapped regions generating even more CO$_2$ with reduced cost.

The states are keenly aware of this problem. The Northeast Regional Greenhouse Gas Coalition has gone so far as to repeatedly advise that “because leakage is a significant issue, the RGGI initiative should not be fully implemented until this issue is addressed either by further modeling or adoption of another mitigation method.”

The question of emissions leakage in other states has been a key issue dogging the Northeast regional greenhouse gas initiative (RGGI), because power plants could simply increase electricity production outside the state to offset limits on power generation prompted by the regional cap on emissions. . . . At a meeting the workgroup held [in May 2006] at the Vermont Law School, officials involved with RGGI noted that even a small increase in emissions outside the region could “swamp the program’s benefits[.]”

The RGGI and others are actively working on their solutions to leakage. Some documents suggest a declining cap, while others imply a portfolio standard with a flexible cap. Others still hint at a ban on uncapped emissions. Broadly, however, these solutions all involve penalizing leakage either through a direct economic charge or by using the purchases as going against the permits. In either event, the purchase of

22 Id. at 37.
27 See Don Thompson, California Eyes Cap-and-Trade Plan to Trim Greenhouse Gases, FREE REPUBLIC, Apr. 6, 2005, http://www.freerepublic.com/focus/f-news/1378853/posts?page=1 ("Western generators could simply send their cleaner power to California and dirtier electricity to states without a cap with no overall drop in emissions.").
out-of-state power becomes artificially more expensive.

V. THE DORMANT COMMERCE CLAUSE

Our Constitution preserves for Congress the right to regulate commerce among the states. Article I, Section 8 of the Constitution provides, among other things, that "Congress shall have power . . . To regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes."28 "Into that affirmative grant the Court has read judicially enforceable limits on state legislation when Congress has not acted."29 In general, if the states interfere with interstate commerce, there is a two part analysis. The first question: (1) Is this an impermissible avenue for state regulation or has the federal government pre-empted this area by issuing its own regulations? If so, then the regulation is struck down without reaching the dormant Commerce Clause analysis. If not, then, (2) See if the law is discriminatory. If it is, "either on its face or in practical effect," the burden falls on the State to demonstrate both that the statute "serves a legitimate local purpose," and that this purpose could not be served as well by available nondiscriminatory means."30 The second question activates the dormant Commerce Clause. Once the Court finds discrimination, very few reasons constitute a legitimate local purpose.

Hotly litigated over the last hundred years, the Supreme Court has invoked the dormant Commerce Clause in cases regulating baitfish,31 milk,32 solid waste,33 and many others. With rare exception, the Court will invalidate any law that has the effect of one state penalizing another state’s goods. "A state tariff on imported goods violates the Commerce Clause 'by handicapping out-of-state competitors, thus artificially encouraging in-state production even when the same goods could be produces [sic] at lower cost in other States.'"34

The best way to illustrate the interaction between the dormant Commerce Clause and climate regulation is through the analysis of three cases: *City of Philadelphia v. New Jersey* ("Philadelphia"),35 the seminal case in this area; *Maine v. Taylor* ("Maine"),36 a rare case of a state’s

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28 U.S. CONST. art. I, § 8, cl. 1, 3. Further, another minority school of thought has looked for the extremities of the dormant Commerce Clause in Article IV, Section 2, which guarantees that the "Citizens of each State shall be entitled to all Privileges and Immunities of Citizens in the several States." U.S. CONST. art. IV, § 2, cl. 1.

29 KATHLEEN M. SULLIVAN & GERALD GUNTHER, CONSTITUTIONAL LAW 245 (15th ed. 2004).


31 Id. at 132, 137-38.


environmentally protective regulation surviving the Court's scrutiny; and the all-important West Lynn Creamery v. Healy ("West Lynn"),\textsuperscript{37} which shows that the Court is more interested in the ultimate economic effect than the structure of the regulation.

A. City of Philadelphia v. New Jersey

This case is perhaps the most significant Commerce Clause case for purposes of analyzing a state's ability to restrict imports for environmental reasons. New Jersey banned liquid and solid waste imports, reasoning that its available landfill was being exhausted through imports and that "the environment continues to be threatened by the treatment and disposal of waste which originated or was collected outside the State."\textsuperscript{38}

The Court was not interested in New Jersey's environmental intentions.\textsuperscript{39} The Court held that "whatever New Jersey's ultimate purpose, it may not be accomplished by discriminating against articles of commerce coming from outside the State unless there is some reason, \textit{apart from their origin}, to treat them differently."\textsuperscript{40}

In Philadelphia, the Court seemed to imply that an article of commerce can only be regulated by a state based on some characteristic inherent in the article moving through commerce. The item's importation or sale must pose some threat to a state interest, not simply its origin. The sold good's origin alone cannot trigger the power of the state. The Court distinguished New Jersey's rule from a quarantine since the imported goods did not differ from New Jersey's own waste.\textsuperscript{41} Even though New Jersey's natural resources (its capacity to dispose of waste) were being exhausted and the practice subjected its residents to harm, the court struck down the regulation because of its ultimate effect on commerce.

B. Maine v. Taylor

This case is the exception that proves the Philadelphia rule. As one of the very few recent cases where the Supreme Court upheld a state's import restriction, the case shows that indistinguishable goods cannot be


\textsuperscript{38} Philadelphia, 437 U.S. at 625.

\textsuperscript{39} See id. at 626 ("This dispute about ultimate legislative purpose need not be resolved, because its resolution would not be relevant to the constitutional issue to be decided in this case."). The Court, as we will see in the West Lynn analysis, discounts intent and focuses on the effect of the regulation. \textit{Id.} at 626-27.

\textsuperscript{40} \textit{Id.} (emphasis added).

\textsuperscript{41} See id. at 628-29 ("It is true that certain quarantine laws have not been considered forbidden protectionist measures, even though they were directed against out-of-state commerce. But those quarantine laws banned the importation of articles such as diseased livestock that required destruction as soon as possible because their very movement risked contagion and other evils. Those laws thus did not discriminate against interstate commerce as such, but simply prevented traffic in noxious articles, whatever their origin.") (citations omitted).
discriminated against. Like Philadelphia, the case was an absolute ban on imports affecting natural resources, in this case, baitfish. The case disclosed that certain baitfish carry harmful bacteria.\(^4\) In contrast, the Philadelphia Court noted that:

There has been no claim here that the very movement of waste into or through New Jersey endangers health, or that waste must be disposed of as soon and as close to its point of generation as possible. . . . [T]here is no basis to distinguish out-of-state waste from domestic waste. If one is inherently harmful, so is the other.\(^4\)

Once it was established that the article of commerce was itself harmful, the only real inquiry for the court was the reasonableness of the state's restriction. While it was technologically feasible for Maine to establish a quality-control program, which checked for bacteria on import, the Court would not compel them to establish one.\(^4\) Even this holding underscored that Maine was addressing an in-state harm that was caused by the importation itself. The entire Maine decision makes clear that when the Court announced that you could not distinguish based on “origin” in their ultimate Philadelphia holding, it truly meant that the states can only regulate based on some characteristic inherent in the goods themselves.

C. West Lynn Creamery

As environmental laws become more complex and involve systems of interlocking policies, the West Lynn analysis seems prophetic and of ever-increasing relevancy. In West Lynn, the Court concerned itself with a combination of Massachusetts laws. The first law required payments by all retail milk dealers to make a deposit into a fund, tied directly to their quantity of milk sold, irrespective of origin.\(^4\) In concert with these payments was a second law that distributed these collected funds to Massachusetts’s dairy farmers.\(^4\)

While a state has long been able to encourage local industry through subsidy without running afoul of the dormant Commerce Clause, it cannot create the same economic advantage by instead taxing those who import.

\(^{42}\) See Maine v. Taylor, 477 U.S. 131, 140–41 (1986) (“The prosecution experts testified that live baitfish imported into the State posed two significant threats to Maine’s unique and fragile fisheries. First, Maine’s population of wild fish—including its own indigenous golden shiners—would be placed at risk by three types of parasites prevalent in out-of-state baitfish, but not common to wild fish in Maine. Second, nonnative species inadvertently included in shipments of live baitfish could disturb Maine’s aquatic ecology to an unpredictable extent by competing with native fish for food or habitat, by preying on native species, or by disrupting the environment in more subtle ways.”) (citation omitted).

\(^{43}\) Philadelphia, 437 U.S. at 629.

\(^{44}\) Maine, 477 U.S. at 147.


\(^{46}\) Id.
The charge violates the dormant Commerce Clause, while the subsidy does not. Similarly, a neutral tax on milk production almost certainly passes constitutional muster. The Court was faced with a conundrum. When several regulations are each, individually, constitutionally permissible, can they all be struck down because of their combined effect? The Court's answer was an unequivocal "yes," holding that it was the entire program—not just the contributions to the fund or the distributions from that fund—that simultaneously burdens interstate commerce and discriminates in favor of local producers. The choice of constitutional [elements of a program]—nondiscriminatory tax and local subsidy—cannot guarantee the constitutionality of the program as a whole.48

A carbon dioxide cap-and-trade program contains several elements, such as the issuance of the permits, their trading system, as well as additional penalties to prevent leakage. The conclusion under West Lynn will be that the Court will look at all of these pieces together. However, there is a second, and perhaps more troubling, element of West Lynn.

Dicta within footnote twenty of the holding gives a clear signal that even the best state environmental motivations will not overcome a dormant Commerce Clause challenge.49 The statement comes from a portion of the opinion where the Court is considering Massachusetts's attempt at a balancing argument—in essence that any damage to interstate commerce is outweighed by local benefits.50 The state's primary argument to the Court was economic, but it included some, perhaps, less-than-thoughtful environmental aspects.51 When advancing a weak environmental

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47 The reasoning behind this is somewhat opaque. There seems to be a vague sense in the cases that a subsidy is a state allocating its own money without actually hurting another individual industry. The response to this is potentially for other states to spend their own money to subsidize. The Court may rationally feel that the in-state political process is a reasonable brake on this process.

48 By conjoining a tax and a subsidy, Massachusetts has created a program more dangerous to interstate commerce than either part alone. Nondiscriminatory measures, like the evenhanded tax at issue here, are generally upheld, in spite of any adverse effects on interstate commerce, in part because "[t]he existence of major in-state interests adversely affected . . . is a powerful safeguard against legislative abuse."

Id. at 199–200.

49 Id. at 201.

50 Id. at 204 n.20.

51 Massachusetts was attempting to move the Court beyond a strict scrutiny standard into a balancing of harms. "Finally, respondent argues that any incidental burden on interstate commerce is outweighed by the local benefits of preserving the Massachusetts dairy industry." West Lynn Creamery, 512 U.S. at 204 (internal quotations omitted).

52 Massachusetts argued that the dairy industry preserves open space, making this an environmental law. The Court was sarcastic on this point: "As the Massachusetts Supreme Judicial Court recognized by relegating the 'open space' point to a single footnote, the argument that environmental benefits were central and the enhancement of the market share of Massachusetts dairy farmers merely 'incidental' turns the pricing order on its head." West Lynn Creamery, 512 U.S. at 204 n.20 (citations omitted). Advocacy sometimes requires the strength to give up weaker arguments in favor of stronger ones. It may be argued that to some lawyers, all facts look the same. One has to
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argument, the Court came back with a strong admonition: "[E]ven if environmental preservation were the central purpose of the pricing order, that would not be sufficient to uphold a discriminatory regulation."52 While dicta, the Court is sending a strong and final message as to where it sees the importance of the dormant Commerce Clause versus state environmental protection initiatives.

In the context of the CO$_2$ cap-and-trade programs, West Lynn’s message is clear: the court is willing to collapse its analysis to measure the ultimate effect on interstate commerce. The length of the commercial chain, or which specific link is being regulated, is irrelevant. Further, whereas Philadelphia and Maine dealt largely with the ability of states to ban goods from commerce, West Lynn was a case of preferential pricing. Finally, the Court made it clear, albeit in dicta, that a preferential pricing program cannot survive, even if it is for a compelling environmental purpose.

VI. SPECIFIC PROBLEMS IN REGULATING LEAKAGE

From the Parts above, the Court, in conducting a Commerce Clause analysis, will ignore environmental purpose but will instead collapse regulations to gain the ultimate affect on commerce. Progressing from most coarse to fine, this Part will review the banning of uncapped power, economic penalties applied to uncapped power, and finally some other solutions recently advanced by RGGI in response to leakage concerns.53

A. Direct Banning of Power in the Wholesale Market

State-based prohibition of power delivery within the wholesale market is an unlikely policy choice and would face substantial challenges long before one even reaches a dormant Commerce Clause analysis. The dormant Commerce Clause activates only when the federal government has not already acted. However, the federal government has reserved the regulation of the wholesale electricity market for itself. "[U]nder the Federal Power Act, states have jurisdiction only over retail electric markets, while FERC [Federal Energy Regulatory Committee] regulates all wholesale transactions."54 According to FERC’s own website, it "[r]egulates the transmission and wholesale sales of electricity in interstate

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52 West Lynn, 512 U.S. at 204–05 n.20.
53 It bears noting that RGGI is frequently mentioned throughout this Article. This is not due to any preference and certainly not due to any condemnation of that organization. It is simply a recognition that the hardworking staff of RGGI are well advanced in their goals and working groups. The author extends his thanks to the RGGI staff—who sometime years ago gave their time to the author both as part of a formal program offered jointly through the Yale School of Forestry and Environmental Studies and Yale Law School as well as personally in direct conversation.
54 Ferrey, supra note 34, at 596.
commerce." Under the title "What FERC Does Not Do" is "[r]egulation of retail electricity and natural gas sales to consumers."56

However, even if not pre-empted, it is highly unlikely that a direct ban would be permissible under Philadelphia. Philadelphia was, itself, a banning case. This case would be directly analogous.57 Given the dicta from the West Lynn decision and the fact that no situation of harmful, distinguishable goods exists, no regional program has substantially advanced such a restriction as a viable alternative.

B. Economic Penalties for Leakage

As opposed to a direct ban on importation, the next logical step is to penalize the purchasers of uncapped power at a level so that they are at least indifferent to and perhaps discouraged from the purchase of uncapped power. This economic penalty would appear when a state charges a fee (either directly or through some cap-based charge) on the retail power distributors or other purchasers of extra-regional, uncapped power. Hypothetically, the state governments would institute a charge against the retail distributor of power for each unit of uncapped power. Alternatively, in the case of a power generator, they could have purchased power "count" in the cap applied to power plant—effectively reducing the amount of in-state power they could produce without purchasing additional certificates. In any event, purchased power bears an extra economic cost—as it must. As described in the beginning of this Article, the only meaningful economic effect a leakage reduction program can have is to make it more expensive to purchase out-of-state products. The incentive to reduce emissions through a cap-and-trade program comes when a company can sell its permits to other power plants. Hence, the cost of reducing GHG emissions is offset, in whole or part, by the value created in selling the permits that the repairing company is no longer using. But that implies a market for these permits. If the new company can buy unregulated power, then the permits have no value and there is no longer an economic incentive. The proper economic penalty would approximate the market price for a permit (or certificate) in the absence of leakage plus the cost of

56 Id.
57 Importantly, the Court took a very dim view of an absolute ban or boycott. The Court in Philadelphia stated:

In Bowman and similar cases, the Court held simply that because the articles' worth in interstate commerce was far outweighed by the dangers inhering in their very movement, States could prohibit their transportation across state lines. Hence, we reject the state court's suggestion that the banning of "valueless" out-of-state wastes by ch. 363 implicates no constitutional protection. Just as Congress has power to regulate the interstate movement of these wastes, States are not free from constitutional scrutiny when they restrict that movement.

monitoring the leakage.

The leakage regulation might have all the appearance of a constitutionally permissible regulation. Either the charge or the cap reduction is enacted without regard to origin by simply charging for uncapped power. The state could justify this through its police power to safeguard the welfare of its citizens. They might produce evidence to show that the environmental harm it faces is real. Economists and climatologists could create models to show the specific damages to the participating regions and equate them to the costs of the programs. But the effect of either a cap change or a charge would be to make imported power more expensive than domestic power. If it does not accomplish this, then it is not an effective means against a substitute and there is no market.

Many of these arguments echo from Philadelphia. Just as in Philadelphia, you would have one state or region of states seeking to "crucial[ly] . . . isolate itself from a problem common to many by erecting a barrier against the movement of interstate trade." Applied to a CO\textsubscript{2} cap-and-trade program, the common problem is CO\textsubscript{2} emissions growth. Just as New Jersey was attempting to preserve its natural resource, its capacity for landfill, so would the cap-and-trade state be trying to preserve its natural resource, its atmosphere or shoreline. Just as New Jersey made the argument that the rapid waste growth rate was dangerous to its citizens, so would the cap-and-trade state argue that the rapid growth in CO\textsubscript{2} will hurt its citizens' health and finances. However, just as in the Philadelphia case, these arguments are likely to fail.

Following the Court's Philadelphia logic, there is nothing unique about the power that is coming into the cap-and-trade state. Power is power; electrons are electrons. The actual good moving through commerce is indistinguishable from the good that is being sold. This is clearly not a case like Maine, where the good itself is harmful.

Even if the environmental police power argument were accepted by the Court, the combined leakage charge under a cap-and-trade system would still be unconstitutional. The portion of the power that was created in-state, under the state-issued permits, emits CO\textsubscript{2} and is indistinguishable from the power produced in the extra-regional territories. Power is power; electrons are electrons. Yet, the imported power engenders a charge. The in-state, permitted power does not. Since it was made under the cap, the extra charges do not apply. This gives the in-state producers an economic, preferential advantage when producing the permitted power.

In this way, the cap-and-trade plus leakage charge combine to look like

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58 Philadelphia, 437 U.S. at 628. The entire sentence reads "What is crucial is the attempt by one State to isolate itself from a problem common to many by erecting a barrier against the movement of interstate trade." Id. The Court made clear that this distinction is "crucial" and should not be lost on any Court observer.

59 Id. at 629.
a system very similar to *West Lynn*'s tax and subsidy combination—facially neutral permitting systems combined with evenhandedly applied leakage systems result in higher import prices. The message from *West Lynn* is that the Court will seek to collapse layers of regulations in order to reach the overall economic effect of the regulation. Once condensed, the Court would easily see the preference given to the in-region, permitted producers, while charges are levied for identical power with similar environmental profiles simply because the others are out of state. One only has to remember the words of *West Lynn*—"even if environmental preservation were the central purpose of the pricing order, that would not be sufficient to uphold a discriminatory regulation"—to realize that a cap-and-trade program that penalizes the goods of other states as leakage protection must fail.

Based on the reasoning in both *Philadelphia* (as explained by *Maine*) and *West Lynn*, there is no credible constitutional argument that allows for a cap-and-trade program to adequately address leakage through economic penalty.

C. Specific Proposals from RGGI to Address Leakage and the Dormant Commerce Clause

The Regional Greenhouse Gas Initiative has addressed leakage in their paper of March 14, 2007, Potential Emissions Leakage and the Regional Greenhouse Gas Initiative (RGGI): Evaluating Market Dynamics, Monitoring Options, and Possible Mitigation Mechanisms. RGGI provided a detailed analysis of the problem:

Currently, there is insufficient information to make refined estimates as to the potential amount of emissions leakage that may occur over the course of the program. Potential emissions leakage is also sensitive to political developments. Given current political momentum toward a national program, Staff views the potential for emissions leakage primarily as a near- to mid-term concern.

However, a follow-up report dated March 2008 demonstrated that RGGI is clearly concerned about the potential constitutional challenge to leakage. The group discusses the scenario of penalizing imported power and discards it without analysis:

In the Initial Report, Staff provided an overview and assessment of the legal considerations involving

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implementation of policy measures to address emissions leakage. Staff noted, among other things, that states cannot purposely discriminate against interstate commerce through the differential treatment of in-state and out-of-state economic interests that benefits the former and burdens the latter.62

Accepting that premise, RGGI’s staff have proposed several leakage solutions; among them are: 1) Reducing Electricity Demand; 2) Carbon Adder and Emissions Rate Mechanisms; and 3) Emissions Portfolio Standards.63

1. Reducing Electricity Demand

Policies and programs that reduce electricity demand can be expected to reduce the demand for fossil fuel-fired electric generation, and thus reduces demand for CO2 allowances and allowance prices. This in turn reduces the generation cost differential imposed on RGGI-affected generation units relative to generation units that are not subject to the RGGI cap, reducing the economic driver of emissions leakage.64

While reducing electricity demand overall is laudable, it bears noting that this first recommendation does nothing to help define the market for trading permits. Instead, it seeks to act on other market drivers in a way to change the market dynamics that may cause leakage. It truly does not address trading certificate value or the market mechanisms. It allows leakage, but simply seeks to reduce its attractiveness.

Advancing this option signals the RGGI’s frustration with the leakage problem. Placed forward as the first recommendation, the demand really does nothing to solve the market failure for state-based carbon certificates. The purchase of extra-regional power will destroy the intra-regional market for GHG-emission certificates whether there is either slight or huge demand.

2. Carbon Adder and Emissions Rate Mechanisms

Another concept includes devices which do not make power more

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62 See RGGI, POTENTIAL EMISSIONS LEAKAGE, supra note 24, at 21 (internal citation omitted).
63 See generally id. The RGGI March 2008 report contains an additional option for discussion called “Capping Emissions Associated with Serving Load.” Id. at 7. In sum, this policy placed a total regional cap for all electricity used within the relevant region. Id. This policy required far more development to be analyzed in conjunction with a cap-and-trade system. Id. at 7–8. Further, as the RGGI staff recognized, it represents a policy alternative that is severable from the original emissions cap-and-trade system: “Due to emissions tracking issues, [RGGI] Staff recommend[s] that if a load-based cap were considered, it should not be implemented in coordination with the RGGI program, but instead should be operated in parallel with the existing program. Trading[,] at[,] least initially, should not be considered between the two systems.” Id. at 37.
64 Id. at 17–18.
expensive through direct charge, but instead which make them appear more expensive at the time of the buying decision. These devices are additions to a cost-benefit analysis spreadsheet that are designed to control the decision of which unit of power to purchase. "A carbon adder incorporates the price of carbon into the financial analysis of different generation supply options, and therefore incorporates the CO2 emissions performance of an investment option into the calculus of whether it is deemed to be the least-cost option."65 This device places a "shadow price" on uncapped sources.66 When the utility is making its buying decision, it will discriminate not economically but analytically in order to choose sources that are lower in carbon.67 This is an attempt to internalize the perceived negative effects of carbon into the buying decision without the state charging actual money. Similarly,

[a] carbon procurement emissions rate is a limit that is placed on the emissions rate of power supplied to [power distributor] through a long-term power purchase agreement. This policy would require all long-term power purchases to meet a specific [pounds of CO2 to Megawatt Hour ratio] emission rate; power could not be supplied through bilateral contracts with power plants that exceed this emissions rate.68

Both of these methodologies are, by RGGI's own admission, difficult to implement.69 Since there is a real question as to whether the carbon adder would have any effect for power purchased on the "spot market," both of these devices are really aimed at affecting a power distributor's ability contracts.70

Unlike the direct economic penalty of the previous section, these plans place non-economic preferences for low-carbon power emissions but instead focuses on the administrative decision to purchase power. If the adders serves as nothing more than a recommendation, then the concept has little direct effect on the market for tradable permits and garners little objection. In contrast, if statutorily enacted so that it compels discrimination against uncapped sources, would the West Lynn analysis really be any different? While there is no direct economic penalty as in West Lynn, and no ban like Philadelphia, these approaches, if enforced,

65 RGGI, INITIAL REPORT, supra note 61, at 32.
66 Id.
67 Id. at 33.
68 Id. at 34.
69 Id. at 35.
70 See id. at ES-8 ("[The carbon adder] would be of limited utility as a planning tool to evaluate the carbon intensity of spot market power purchases, as this is a mix of system power including both low-emitting and high-emitting units, and [Power Distributors] are price takers in the spot market. LSE purchases of spot market power would not impact the carbon intensity of this power, although LSEs, when managing their power procurement, would need to account for the carbon intensity of spot-market power when making a decision to purchase from the spot market.").
both create an institutional preference for the electrons that come from within the region. They are "cheaper" in the buying calculation that drives the decision even if not cheaper in actual payment. Power producers with higher carbon production are no longer on an equal footing. "[E]ven if environmental preservation were the central purpose of the pricing order, that would not be sufficient to uphold a discriminatory regulation."\textsuperscript{71}

3. Emissions Portfolio Standards

Another potential CO$_2$-mitigation policy is to create resource portfolios. "A resource portfolio requirement requires certain electricity sellers and/or buyers to maintain a predetermined percentage of designated clean resources in their [power] mix."\textsuperscript{72} This is required of the retailers, but there is no in-state or out-of-state preference. While legally attractive, these are practically difficult.

[U]ncertainty . . . remain[s] as to the efficacy level of this mechanism. . . .

One disadvantage is that while the policy would limit carbon intensity by holding [a power distributor] to a [pounds of CO$_2$ per Megawatt Hour ratio] standard, the electricity demand within [a power distributor's] service territory could continue to increase, which could allow for an increase in absolute emissions of carbon.

Another potential problem is the potential for "attribute shuffling." An emissions portfolio standard would likely be implemented using an environmental attribute credit trading system, which separates the generation attributes from the electricity commodity. This could be problematic in an open system that includes both regulated and unregulated regions. If an [Emissions Portfolio Standard] is not properly designed, such a compliance mechanism could potentially allow an [energy supplier] to purchase environmental attributes from low-emitting generation outside of the RGGI region without changing its power procurement practices.\textsuperscript{73}

Finally, like the first goal to reduce energy, this solution does not provide market integrity for the certificates. Instead, it simply provides a predetermined method where energy suppliers are to adjust their purchases, making leakage less likely but possible. So-called "green" electricity could also be purchased from many external sources—filling the portfolio but damaging the worth of the cap-and-trade certificates.

\textsuperscript{71} West Lynn Creamery, Inc. v. Healy, 512 U.S. 186, 204 n.20 (1994).
\textsuperscript{72} Ferrey, supra note 34, at 529.
\textsuperscript{73} RGGI, INITIAL REPORT, supra note 61, at ES-10.
VII. CLIMATE LAW MUST BE FEDERAL

There is no substitute for a federal climate law. The dormant Commerce Clause virtually dooms any regional efforts to create a cap-and-trade program without leakage. The trading certificates can no longer have real value as the market substitutes are available. The RGGI staff points out that "potential for emissions leakage primarily as a near- to mid-term concern" in light of pending federal regulations. Pursuing state or regionally based cap-and-trade systems has political effectiveness.

A cap-and-trade program that does not address leakage will fail in the long term. The more successful the program, the greater incentives it provides to find ways to have uncapped regions produce power. Rather than limit CO₂, it only highlights what regions will be the most lucrative for the uncapped power suppliers to target.

Cap-and-trade programs are complex and require both investments in monitoring and political capital. Should a cap-and-trade program be enacted, then fail a constitutional challenge, a governor would question the appropriateness of state-based climate initiatives in total. The remaining, leaking, cap-and-trade system will be attacked on fairness grounds by politically active in-state power companies. Once it is clear that only the regions that own power plants are capped, yet the primary polluters are not just escaping penalty but are also benefiting, the system should unravel. Further, legislators would then be reticent to continue to pressure for a federal system, right at a time when it is most needed. The risks are too great as a state-based initiative but non-existent as a federal system.

This is no accident that our constitutional jurisprudence all but halts this regional effort. Our federalist structure exists to have a national government that solves national problems. Each GHG unit emitted has a national and global impact. Our history and our structure preserve these kinds of issues for the federal government. On the issue of Global Climate Change, the electorate is demanding the creation of a Climate Law despite a deaf ear from the federal executive and legislative branches. Our system is designed to put increasing political pressure on these federal legislators to solve this national problem. That is not to say that regional programs are without merit. While our laws may prevent their true enactment, their very creation assists in the political dialogue and, in no small measure, will serve as one of the bulwarks to move the federal agenda.

VIII. CONCLUSION

In conclusion, the dormant Commerce Clause problem should encourage policy makers to abandon any long term reliance on regional

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74 "Potential emissions leakage is also sensitive to political developments. Given current political momentum toward a national program, Staff views the potential for emissions leakage primarily as a near- to mid-term concern." RGGI, INITIAL REPORT, supra note 61, at ES-2.
cap-and-trade programs in lieu of other solutions and lobbying for a federal GHG initiative. The regional cap-and-trade programs are not an adequate substitute for a national policy. They paradoxically provide long-term economic advantages to the very effects they attempt to cure. Any attempt to address leakage in conjunction with these programs will run into serious constitutional challenges. The best use of these programs is for the political pressure they bring to bear on our federal legislators. In the final analysis, though, the best efforts of all are aimed toward encouraging the development of a Federal Climate Law.