

THE COMMERCE CLAUSE MEETS ENVIRONMENTAL PROTECTION: THE COMPENSATORY TAX DOCTRINE AS A DEFENSE OF POTENTIAL REGIONAL CARBON DIOXIDE REGULATION

Abstract: On December 20, 2005, seven northeastern states signed the Regional Greenhouse Gas Initiative ("RGGI"), an agreement aimed at reducing greenhouse gas pollution from power plants. Once enacted by each state's legislature or rulemaking agencies, this agreement will establish a "cap-and-trade" program to cap greenhouse gas emissions within the region and allow power plants to trade emissions allocations. This program faces a significant challenge, however. Electricity suppliers within the region may import power from outside the regulated region to avoid the constraints of the emissions cap, resulting in little or no net decrease in overall emissions—a problem known as "leakage." Because limiting emissions imports would inevitably place burdens on the interstate trade of electricity, the regulatory approaches available to RGGI states to limit imports of power from unregulated regions may be subject to attack as violations of the Commerce Clause of the U.S. Constitution. This Note explores the possibility of applying the concepts embodied in the compensatory tax doctrine to defend a regulatory scheme that the RGGI states might employ to combat leakage.

INTRODUCTION

On December 20, 2005, seven northeastern states signed an agreement to implement the Regional Greenhouse Gas Initiative ("RGGI") in an effort to reduce greenhouse gas pollution from power plants.¹ This agreement marked the first formal commitment to im-

¹ See Regional Greenhouse Gas Initiative Memorandum of Understanding 12 (Dec. 20, 2005) [hereinafter RGGI MoU], available at http://www.rggi.org/docs/mou_final_12_20_05.pdf. Greenhouse gases are those gases in the earth's atmosphere that contribute to the "greenhouse effect"; that is, they absorb and reradiate energy from the sun back toward the earth, causing the earth's surface and lower atmosphere to warm more than they otherwise would. See C.C. LEE, *DICTIONARY OF ENVIRONMENTAL LEGAL TERMS* 284 (1st ed. 1996); Environmental Protection Agency, *Terms of Environment: Glossary, Abbreviations, and Acronyms*, <http://www.epa.gov/OCEPaterms/gterms.html> (last visited Aug. 29, 2006).

Seven states are participating in the RGGI program: Connecticut, Delaware, Maine, New Hampshire, New Jersey, New York, and Vermont. See RGGI MoU, *supra*, at 1, 6–7. The

plementing a market-based trading program for carbon dioxide ("CO₂") emissions in the United States.² In March 2006, California's Environmental Protection Agency released a report summarizing the emissions trading program options that the state was exploring for regulating greenhouse gas emissions.³ Both the RGGI agreement and the California report, however, identify a particular concern regarding regional cap-and-trade emissions programs—that of "leakage."⁴

Leakage—the movement of emissions from regulated to unregulated regions to avoid caps on emissions—can occur when a cap-and-trade scheme is implemented on a state or regional, rather than national, level.⁵ Electricity suppliers begin to import power from outside the regulated region to avoid the constraints of the emissions cap, resulting in little or no net decrease in overall emissions associated with the power consumed inside the region.⁶ To combat this problem, the RGGI states and California could limit emissions associated with en-

Memorandum of Understanding also contains an explicit provision allowing Massachusetts and Rhode Island to become signatories at any time prior to January 1, 2008, under certain conditions. *See id.* at 8.

² *See* RGGI MoU, *supra* note 1, at 1–2; ENV'T NE., THE REGIONAL GREENHOUSE GAS INITIATIVE: AN OVERVIEW OF THE RGGI PROGRAM AND ITS IMPORTANCE 3 (2005) [hereinafter ENV'T NE. OVERVIEW], http://www.env-ne.org/Program%20Fact%20Sheets/ENE_RGGI_Background.pdf. Market-based regulatory programs are commonly referred to as cap-and-trade programs. *See infra* note 23 and accompanying text. These programs implement an aggregate cap on allowable emissions in a region through government regulation. *See infra* note 25 and accompanying text. The cap is then distributed to polluters in the form of allowances. *See infra* note 26 and accompanying text. Each polluter must own enough allowances to cover its own emissions, but polluters are allowed to buy and sell allowances among each other. *See infra* notes 27–32 and accompanying text.

³ *See generally* CAP AND TRADE SUBGROUP, CAL. CLIMATE ACTION TEAM, CAP AND TRADE PROGRAM DESIGN OPTIONS (2006) [hereinafter CALIFORNIA REPORT], available at http://www.climatechange.ca.gov/climate_action_team/reports/2006-03-27_CAP_AND_TRADE.PDF. The Cap and Trade Subgroup's report was appended to the Climate Action Team's more general report evaluating the impact of climate change on California and the options available to the state, which was presented to the California legislature and Governor Arnold Schwarzenegger. *See* CAL. CLIMATE ACTION TEAM, CAL. ENVTL. PROT. AGENCY, CLIMATE ACTION TEAM REPORT TO GOVERNOR SCHWARZENEGGER AND THE LEGISLATURE 5 (2006), available at http://www.climatechange.ca.gov/climate_action_team/reports/2006-04-03_FINAL_CAT_REPORT.PDF; *see also* Climate Action Team Reports to the Governor and Legislature, http://www.climatechange.ca.gov/climate_action_team/reports/index.html (last visited Sept. 16, 2006) (listing the Climate Action Team's reports and appendices). On August 30, 2006, California's leaders announced an agreement to enact legislation that would place sharp limits on carbon dioxide emissions within the state. *See* Felicity Barringer, *Officials Reach California Deal to Cut Emissions*, N.Y. TIMES, Aug. 30, 2006, at A1.

⁴ *See* CALIFORNIA REPORT, *supra* note 3, at 22; RGGI MoU, *supra* note 1, at 9.

⁵ *See* CALIFORNIA REPORT, *supra* note 3, at 22.

⁶ *See id.*

ergy imported into the region.⁷ Because limiting interstate imports places burdens on the trade of electricity, however, this approach may be subject to attack under the Interstate Commerce Clause of the U.S. Constitution.⁸

This Note explores the possibility of applying the concepts embodied in the compensatory tax doctrine to defend a regulatory scheme that might be employed to combat leakage, focusing on RGGI as the model scheme.⁹ The compensatory tax doctrine stands for the principle that even if a state regulation burdens interstate commerce, it may survive constitutional scrutiny if it is a compensatory tax designed merely to make interstate commerce bear a burden already borne by intrastate commerce.¹⁰ Any regulation the RGGI states adopt to address leakage will necessarily impose burdens on interstate commerce because they will have to limit, either directly or indirectly, electricity imports from out of state.¹¹ This Note argues that the RGGI states, and any reviewing court, should draw on compensatory tax doctrine principles in crafting, and supporting, a regulation that imposes burdens on imported electricity.¹²

Part I of this Note provides an introduction to the RGGI program and the particular problem of leakage.¹³ Part II introduces the potential legal challenges to the program based on the Commerce Clause of the U.S. Constitution, and explores the compensatory tax doctrine as developed by the U.S. Supreme Court.¹⁴ Part III analyzes the application of Commerce Clause jurisprudence and the compensatory tax doctrine to the alternatives that RGGI may use to combat the problem

⁷ See Richard Cowart, *Another Option for Power Sector Carbon Cap and Trade Systems—Allocating to Load* 3–4 (Regulatory Assistance Project, 2004), http://www.rggi.org/docs/allocating_to_load.pdf; see also CALIFORNIA REPORT, *supra* note 3, at 21–22.

⁸ See U.S. CONST. art. I, § 8, cl. 3 (granting authority to regulate interstate commerce to the federal government); STACEY E. DAVIS, CTR. FOR CLEAN AIR POLICY, POLICY OPTIONS FOR REDUCING GREENHOUSE GAS EMISSIONS FROM POWER IMPORTS 20 (2005) [hereinafter POLICY OPTIONS], available at <http://www.energy.ca.gov/2005publications/CEC-600-2005-010/CEC-600-2005-010-D.PDF> (identifying differential treatment of in-state and out-of-state power as a potential Commerce Clause violation).

⁹ See *infra* notes 18–272 and accompanying text. The arguments in this Note could also be applied to the regulatory scheme that California is currently adopting. See *supra* note 3.

¹⁰ See *Fulton Corp. v. Faulkner*, 516 U.S. 325, 331 (1996) (quoting *Assoc. Indus. of Mo. v. Lohman*, 511 U.S. 641, 647 (1994)); see also Walter Hellerstein, *Complimentary Taxes as a Defense to Unconstitutional State Tax Discrimination*, 39 TAX LAW. 405, 406 (1986) (examining compensatory tax doctrine jurisprudence).

¹¹ See *infra* notes 43–66 and accompanying text.

¹² See *infra* notes 190–195 and accompanying text.

¹³ See *infra* notes 18–66 and accompanying text.

¹⁴ See *infra* notes 67–189 and accompanying text.

of leakage and evaluates the likely success of those options.¹⁵ Part III concludes that although the compensatory tax doctrine may not be directly applicable to the regulation of emissions leakage, the legal principles it embodies should be used to uphold the regulation.¹⁶ In addition, if RGGI can overcome the legal and political obstacles in its path, it may serve as an effective experiment in the regulation of CO₂ emissions and eventually could be a template for a national regulatory program aimed at slowing global warming.¹⁷

I. CLIMATE CHANGE AND THE REGIONAL GREENHOUSE GAS INITIATIVE

The states participating in RGGI are taking action because they recognize that climate change poses serious risks to human health and global ecosystems.¹⁸ Climate change is a result of global warming, which in turn is caused by the accumulation of greenhouse gases in the earth's atmosphere, principally CO₂.¹⁹ Various scientific models indicate that the average global temperature could rise by up to 7.7 degrees Fahrenheit by the middle of this century.²⁰ This expected temperature increase could greatly exacerbate shortages of food, water, and energy supplies, and increase the number of refugees around the world—not to mention raise national security concerns relating to

¹⁵ See *infra* notes 190–272 and accompanying text.

¹⁶ See *infra* notes 190–272 and accompanying text.

¹⁷ See *infra* notes 190–195 and accompanying text.

¹⁸ See RGGI MoU, *supra* note 1, at 1.

¹⁹ See Eileen Claussen, *An Effective Approach to Climate Change*, SCIENCE, Oct. 29, 2004, at 816; Joint Science Academies' Statement: Global Response to Climate Change 1 (June 7, 2005), <http://nationalacademies.org/onpi/06072005.pdf>. Carbon dioxide is the most abundant anthropogenic greenhouse gas in the world. ENV'T NE. OVERVIEW, *supra* note 2, at 1. It is released into the atmosphere when carbon-based fuel is burned. See *id.* In 1780, the level of CO₂ in the earth's atmosphere was approximately 280 parts per million ("ppm") and had been for at least 6000 years. See Elizabeth Kolbert, *The Climate of Man III: What Can Be Done?*, THE NEW YORKER, May 9, 2005, at 54. As the industrial age took hold, CO₂ concentrations began to rise—slowly at first and then more rapidly. See *id.* By the 1970s, the CO₂ concentration in the atmosphere was approximately 330 ppm and in 2000 it reached 369 ppm. *Id.*; see also Lester R. Brown, *Growing . . . Growing . . . Gone?*, MOTHER EARTH NEWS, Dec.–Jan. 2004, at 70, available at http://www.motherearthnews.com/Nature_and_Environment/2003_December_January/Growing_Growing_Gone_.

²⁰ See Elizabeth Kolbert, *The Climate of Man II: The Curse of Akkad*, THE NEW YORKER, May 2, 2005, at 69. This predicted increase in temperature is based on model predictions that show that if we continue to produce greenhouse gases at the rates necessary to meet increasing demand, atmospheric CO₂ will reach 500 ppm around the middle of this century. *Id.* There is evidence that CO₂ concentrations in the earth's atmosphere were that high about fifty million years ago when crocodiles lived in Colorado and ocean levels were three hundred feet higher than they are today, putting much of today's inhabited land underwater. Kolbert, *supra* note 19, at 54.

nuclear proliferation, terrorism and the potential for war.²¹ For this reason, many countries, as well as state and local governments and private economic entities in the United States, are taking action to limit greenhouse gas emissions.²²

A. The Regional Greenhouse Gas Initiative: Regulatory Structure

The purpose of the RGGI program is to regulate CO₂ emissions using a market-based approach, commonly referred to as cap-and-trade.²³ The cap-and-trade approach allows facilities subject to the regulation to achieve emission reduction targets, and thus avoid potential penalties, in an economically efficient manner.²⁴ Under the

²¹ See generally PETER SCHWARTZ & DOUG RANDALL, AN ABRUPT CLIMATE CHANGE SCENARIO AND ITS IMPLICATIONS FOR UNITED STATES NATIONAL SECURITY (2003), available at http://www.environmentaldefense.org/documents/3566_AbruptClimateChange.pdf. This report, commissioned by the U.S. Department of Defense, identified these and other consequences as the possible and even likely results of an abrupt climate change event that could be caused by the collapse of the Atlantic conveyor as a result of global warming. See *id.* at 1–3; see also RGGI MoU, *supra* note 1, at 1.

²² See M.J. Bradley & Associates, *Momentum Builds in the U.S.—What's Filling the Federal Vacuum on Climate Change?*, ENV'TL. ENERGY INSIGHTS, Apr.–May 2005, at 1–4. Through the Kyoto Protocol, most of the countries in the world, including the United Kingdom, the European Union nations, and Russia, have committed to reducing greenhouse gas emissions to at least 5% below 1990 levels by 2012. See Kyoto Protocol to the United Nations Framework Convention on Climate Change, Dec. 10, 1997, 37 I.L.M. 22 (1998); United Nations Framework Convention on Climate Change, Kyoto Protocol: Status of Ratification, http://unfccc.int/files/essential_background/kyoto_protocol/application/pdf/kpstats.pdf (last visited Aug. 31, 2006). On January 1, 2005, the European Union launched a cap-and-trade program covering CO₂ emissions from large industrial polluters that will eventually cover twenty-five countries with a target of reducing CO₂ emissions to 8% below 1990 levels by 2012. EUROPEAN COMM'N, EU ACTION AGAINST CLIMATE CHANGE 3 (2005), http://ec.europa.eu/environment/climat/pdf/emission_trading2_en.pdf; see also Joseph A. Kruger & William A. Pizer, *Greenhouse Gas Trading in Europe: The New Grand Policy Experiment*, ENV'T, Oct. 2004, at 8–23 (analyzing the European Union emissions trading system). Individual states, including New Hampshire, Massachusetts, California, Oregon, and Washington, have made commitments to reducing greenhouse gases. See M.J. Bradley & Associates, *supra*, at 2–3. Mayors from 132 U.S. cities have taken the Kyoto pledge of 7% reductions below 1990 levels by 2012, and fifty of the world's largest cities signed onto greenhouse gas emission reductions of 25% by 2030 at the U.N. World Environment Day conference held in June 2005. *Id.* at 3–4. Additionally, in 2003, various institutional investors representing \$2.7 trillion worth of assets formed the Investor Network on Climate Risk to examine the risks of climate change to their portfolios. *Id.* at 1. The group called on members to invest \$1 billion in companies developing clean technologies and to adopt standards for climate risk disclosure. *Id.* at 1–2. In 2005, JPMorgan Chase announced that it would factor CO₂ emissions into its lending practices. *Id.* at 2.

²³ See RGGI MoU, *supra* note 1, at 2.

²⁴ See ENV'T NE. OVERVIEW, *supra* note 2, at 2. To ensure compliance with the cap, the RGGI states will develop a method of enforcement that may be imposed on the regulated

standard cap-and-trade model, the government sets an aggregate cap on the amount of allowable emissions in the region.²⁵ The cap is then distributed either through allocation or sale to each emitting facility in the form of allowances, where one unit (usually a ton) of pollutant equals one allowance.²⁶ Each facility must own the same number of allowances as the number of tons of pollutant it emits.²⁷ The current proposal is to implement the RGGI cap in two phases.²⁸ Between the years 2009 and 2015, the RGGI states will cap CO₂ emissions at approximately 120 million tons, which is approximately equivalent to the average emissions of the highest three years between 2000 and 2004.²⁹ In the second phase the cap will be reduced by 10% from 2015 through 2020.³⁰

The cap-and-trade approach creates a market for the allowances when a cleaner power facility has more allowances than it needs to cover its emissions.³¹ The cleaner facility can then sell its surplus allowances to dirtier facilities that do not have enough allowances to cover their emissions.³² If the demand for allowances increases, the market price for allowances also will increase.³³ Dirtier facilities then face the choice of either reducing emissions or purchasing allowances

facilities. See MODEL RULE § XX-6.5 (Reg'l Greenhouse Gas Initiative 2006), http://www.rggi.org/docs/model_rule_8_15_06.pdf (setting out a model compliance scheme).

²⁵ See ENV'T NE. OVERVIEW, *supra* note 2, at 2; OFFICE OF AIR AND RADIATION, U.S. ENVTL. PROT. AGENCY, TOOLS OF THE TRADE: A GUIDE TO DESIGNING AND OPERATING A CAP AND TRADE PROGRAM FOR POLLUTION CONTROL 1-2 (2003) [hereinafter EPA GUIDE], available at <http://www.epa.gov/airmarkets/international/tools.pdf>.

²⁶ See ENV'T NE. OVERVIEW, *supra* note 2, at 2; EPA GUIDE, *supra* note 25, at 1-2.

²⁷ See ENV'T NE. OVERVIEW, *supra* note 2, at 2; EPA GUIDE, *supra* note 25, at 1-2.

²⁸ Memorandum from the RGGI Staff Working Group to RGGI Agency Heads 2 (Aug. 24, 2005) [hereinafter RGGI Staff Memorandum], http://www.rggi.org/docs/rggi_proposal_8_24_05.pdf.

²⁹ See *id.*; see also RGGI MoU, *supra* note 1, at 2. If Massachusetts and Rhode Island join the program, the cap will be increased to approximately 150 million tons. See RGGI MoU, *supra* note 1, at 8.

³⁰ RGGI Staff Memorandum, *supra* note 28, at 2.

³¹ See EPA GUIDE, *supra* note 25, at 1-2 to -3.

³² See *id.* Cap-and-trade is a workable solution in the case of CO₂ because CO₂ is a uniform pollutant; it has the same atmospheric impact regardless of where the source is located. See ENV'T NE. OVERVIEW, *supra* note 2, at 2. By contrast, localized pollutants such as mercury and particulate matter directly impact the health of the local communities and ecosystems surrounding the emission source. *Id.* This localized impact raises concerns over the creation of "hotspots" of pollution and related social and environmental justice issues. See EPA GUIDE, *supra* note 25, at 2-2. Therefore, for localized pollutants it is usually necessary to implement site-specific command-and-control regulation, which does not allow the flexibility of cap-and-trade programs. See *id.*

³³ See EPA GUIDE, *supra* note 25, at 1-2 to -4.

because the net emissions from the region cannot exceed the cap.³⁴ This approach gives facilities flexibility not available to them under traditional command and control regulations; each facility can design its own compliance strategy based on economic efficiency and adjust its strategy over time in response to changes in technology and the market.³⁵ In fact, the federal government used a cap-and-trade program to regulate the emissions that cause acid rain largely because of the flexibility the approach offers.³⁶

Because the federal government has not implemented a national regulatory program for CO₂ emissions, the northeastern states, through RGGI, may act without fear of preemption by existing federal law.³⁷ This does not mean, however, that RGGI lacks legal obstacles.³⁸ For example, although each state has the individual authority to regulate CO₂ emissions, each must determine how to fit that regulation within its state regulatory framework.³⁹ Some states can adopt the RGGI regulations through the rulemaking authority vested in their

³⁴ See *id.* at 1-2 to -3. Dirtier facilities that exceed the emissions cap may be subject to additional penalties. See *supra* note 24.

³⁵ See EPA GUIDE, *supra* note 25, at 1-2. In addition to investing in non-emitting forms of energy generation such as wind and solar energy, regulated facilities will have an incentive to improve end-use efficiency, transition to cleaner fossil fuels, invest in more efficient generation and transmission technology, and even utilize carbon capture and sequestration techniques to offset their emissions if it is economically efficient to do so. See *id.* at 1-3; see also CALIFORNIA REPORT, *supra* note 3, at 24.

³⁶ See 42 U.S.C. § 7651 (b) (2000) (aiming to reduce emissions of sulfur dioxide and nitrogen oxide through an emissions allocation and transfer system); see also CALIFORNIA REPORT, *supra* note 3, at 11-12 (noting the success of the federal government's acid rain reduction program). The largest-scale use of the cap-and-trade model in the United States to date is the federal government's acid rain program under Title IV of the Clean Air Act, but the model has also been used in regional programs. See 42 U.S.C. § 7651 (2000); CALIFORNIA REPORT, *supra* note 3, at 11-15. Two regional programs, the Northeast NO_x Budget Program and the Regional Clean Air Incentives Program ("RECLAIM"), used a cap-and-trade emissions program to regulate ozone and smog, respectively, with varying degrees of scope and success. See CALIFORNIA REPORT, *supra* note 3, at 13-14.

³⁷ See ENV'T NE. OVERVIEW, *supra* note 2, at 3. This statement assumes that RGGI does not attempt to regulate electricity transmission or wholesale transactions per se that are regulated by the Federal Energy Regulatory Commission under the Federal Power Act. See 16 U.S.C. § 824 (2000); see also Note, *Foreign Affairs Preemption and State Regulation of Greenhouse Gas Emissions*, 119 HARV. L. REV. 1877, 1878 (2006) (arguing that state regulation of greenhouse gases should not be preempted by the federal foreign affairs power).

³⁸ See Peter Glaser, Troutman Sanders LLP, Regional Greenhouse Gas Initiative: A Contrarian Perspective, Presentation to the American Bar Association's Environment, Energy and Resources Section 23 (Jan. 26, 2006), <http://www.abanet.org/enviro/committees/renewableenergy/teleconarchives/012606/1-26-06GlaserPPT.PPT> (contending that the RGGI states face Compact Clause and Commerce Clause hurdles and questioning whether the states have the political will to regulate CO₂ if legislation is required).

³⁹ See RGGI MoU, *supra* note 1, at 7.

respective state agencies, while others require enabling legislation to give effect to the RGGI rules.⁴⁰ Once the cap-and-trade regulations have been adopted, each RGGI state will monitor and enforce those rules.⁴¹ That enforcement may raise additional challenges—in particular, the problem of leakage.⁴²

B. *The Problem of Leakage and Regulations That Burden Interstate Commerce*

Implementing a cap-and-trade program at the regional level presents problems that do not arise when a similar program is implemented at the national level.⁴³ The RGGI cap-and-trade program will operate on the supply side—that is, CO₂ emission allowances will be allocated to, and traded among, fossil fuel-fired electricity generators within the region that supply electricity to the grid.⁴⁴ Because the emissions cap will apply only to in-region generators, the RGGI plan will not limit emissions from electricity that is imported into the region and used by consumers within RGGI states.⁴⁵ Generators outside the capped region will be able to export power freely to the entities inside the region that are responsible for procuring and delivering electric power to consumers without concern for the cap—resulting in emissions leakage.⁴⁶ Entities that deliver electricity to the consumer are referred to as load-serving entities (“LSEs”).⁴⁷

⁴⁰ See *id.*

⁴¹ See *id.*

⁴² See *id.* at 9.

⁴³ See POLICY OPTIONS, *supra* note 8, at 4–5, 8 (discussing problems of regulatory programs that do not cap emissions outside the regulating state, including the problem of leakage); ROBERT R. NORDHAUS & STEPHEN C. FOTIS, PEW CTR. FOR GLOBAL CLIMATE CHANGE, ANALYSIS OF EARLY ACTION CREDITING PROPOSALS 31 (1998), <http://www.pewclimate.org/document.cfm?documentID=237> (identifying displacement of emissions from sources within the program to sources outside the program as a potential problem facing non-national programs).

⁴⁴ See RGGI MoU, *supra* note 1, at 2; Regional Greenhouse Gas Initiative, About RGGI, <http://www.rggi.org/about.htm> (last visited Aug. 23, 2006); *supra* notes 23–27 and accompanying text.

⁴⁵ See CALIFORNIA REPORT, *supra* note 3, at 22–23; Cowart, *supra* note 7, at 5.

⁴⁶ See CALIFORNIA REPORT, *supra* note 3, at 22–23; Cowart, *supra* note 7, at 5. The program cap will cover all in-region fossil fuel-fired electricity-generating units having a rated capacity equal to or greater than twenty-five megawatts. See RGGI MoU, *supra* note 1, at 2. The program may be expanded in the future to include other sources of greenhouse gas emissions and greenhouse gases other than CO₂. See Regional Greenhouse Gas Initiative, About RGGI, <http://www.rggi.org/about.htm> (last visited Aug. 23, 2006).

⁴⁷ See CALIFORNIA REPORT, *supra* note 3, at 21; Cowart, *supra* note 7, at 2.

The leakage problem presents two related problems for regulators in the RGGI region.⁴⁸ First, generators outside the RGGI region will have a competitive advantage over generators within the region because they will have little incentive to invest in the cleaner technologies required to achieve the emission cap.⁴⁹ As a result, electricity outside the region will become less expensive than electricity produced inside the region.⁵⁰ This leads to the second problem.⁵¹ The resulting increase in cheaper, imported electricity will undermine the goal of the program because imported emissions will not count towards the region's emission limits even though they are directly associated with the region's electricity consumption.⁵²

As expressed in their Memorandum of Understanding, the RGGI states already are committed to a supply side cap-and-trade program.⁵³ During the initial phase of the program, the RGGI states have decided not to take direct regulatory action to stem leakage, but have agreed to implement measures to monitor electricity imports and reevaluate whether action is required at a later date.⁵⁴ In the meantime, the RGGI states will establish a working group to consider potential options for addressing leakage.⁵⁵

Various options are available to address the problem of leakage.⁵⁶ One option is to supplement the initial domestic cap-and-trade program (imposed on in-state electricity generators as a source of emissions) with a second, load-side cap-and-trade regulation imposed on

⁴⁸ See CALIFORNIA REPORT, *supra* note 3, at 22–23; Cowart, *supra* note 7, at 5.

⁴⁹ See CALIFORNIA REPORT, *supra* note 3, at 22–23; Cowart, *supra* note 7, at 5.

⁵⁰ See CALIFORNIA REPORT, *supra* note 3, at 22–23; Cowart, *supra* note 7, at 5.

⁵¹ See CALIFORNIA REPORT, *supra* note 3, at 22–23; Cowart, *supra* note 7, at 5.

⁵² See CALIFORNIA REPORT, *supra* note 3, at 22–23; Cowart, *supra* note 7, at 5.

⁵³ See RGGI MoU, *supra* note 1, at 2.

⁵⁴ See *id.* at 9.

⁵⁵ *Id.*

⁵⁶ See CALIFORNIA REPORT, *supra* note 3, at 22–24; Cowart, *supra* note 7, at 5. For example, California is exploring a variation of the cap-and-trade approach referred to as allocation-to-load. CALIFORNIA REPORT, *supra* note 3, at 21. Under this approach emission allowances are allocated to electricity providers, or LSEs, rather than to electricity generators. *Id.* Each LSE must hold allowances equal to the emissions created by the electricity it distributes to consumers. *Id.* Under a complete allocation-to-load program, the regulated LSE must hold allowances for all emissions associated with the electricity it sells to consumers, regardless of where the producing generator is located, and the cap applies to total emissions associated with all electricity consumed in the state. *Id.* In this way, imported energy, as well as domestic energy, is accounted for in the cap. See CALIFORNIA REPORT, *supra* note 3, at 21–23; Cowart, *supra* note 7, at 5.

LSEs, but only on the electricity they import into the region.⁵⁷ This load-side regulation would treat electricity imports as an additional source of emissions included in the CO₂ emissions cap for the region.⁵⁸ LSEs would initially be allocated CO₂ allowances on the same basis as that of in-region generators—LSEs would receive allocations based on historic imports just as generators receive allocations to cover their historic generation.⁵⁹ In-state generators would be legally responsible for their own emissions under the first regulation.⁶⁰ Under the second regulation, LSEs would be legally responsible for the emissions associated with the electricity they import from states outside the RGGI region and distribute to in-state consumers.⁶¹ The total cap on CO₂ emissions would therefore cover those emissions produced in the region by electricity generators, as well as those emissions produced outside the region that are directly associated with consumer demand for electricity inside the region.⁶² The LSEs would engage in the same market for allowances with electricity generators and make operating choices based on economic efficiency.⁶³

This regulatory scheme would likely face challenges based on the Interstate Commerce Clause of the U.S. Constitution, however, because the regulation imposed on LSEs would place restrictions only

⁵⁷ Cf. CALIFORNIA REPORT, *supra* note 3, at 21–23 (discussing the possibility of regulating CO₂ emissions through LSEs, rather than generators). This Note does not address the question of whether individual states have the authority to regulate the emissions associated with imported power purchased by regulated LSEs. See *id.* (discussing existing regulatory authority and additional authority that would require legislative action to regulate all LSEs in California). This question depends heavily on state-specific legal issues. See *id.*; see also RGGI MoU, *supra* note 1, at 7.

⁵⁸ See CALIFORNIA REPORT, *supra* note 3, at 21–23; Cowart, *supra* note 7, at 5.

⁵⁹ See CALIFORNIA REPORT, *supra* note 3, at 21–23; Cowart, *supra* note 7, at 5. The current proposed cap for the total RGGI region—approximately 120 million short tons—is based on the average emissions of the highest three years between 2000 and 2004 for each state. See RGGI MoU, *supra* note 1, at 2; RGGI Staff Memorandum, *supra* note 28, at 2. Generators and LSEs alike would receive allowances on this same historic basis. See CALIFORNIA REPORT, *supra* note 3, at 21–23; Cowart, *supra* note 7, at 5.

⁶⁰ See CALIFORNIA REPORT, *supra* note 3, at 21–23; Cowart, *supra* note 7, at 5.

⁶¹ See CALIFORNIA REPORT, *supra* note 3, at 21. The assignment of CO₂ attributes to imported electricity for the purposes of measuring emissions associated with consumption in the state is a complicated issue that is not addressed in this Note. See *id.* at 23. Several methods are available. See *id.* Before choosing a method, the regulating community must consider the impact that each method could have on the legal analysis presented herein. See *id.*

⁶² See *id.* at 21–23.

⁶³ See *id.*

on imported electricity.⁶⁴ Electricity generators outside the RGGI region wishing to sell into the region at lower prices likely will challenge the regulation as a violation of the dormant Commerce Clause, which prohibits any state from enacting regulations that discriminate against (or place burdens on) interstate commerce.⁶⁵ The RGGI states should thoroughly consider potential Commerce Clause challenges before implementing a cap-and-trade program on electricity imported by LSEs to stem leakage.⁶⁶

II. COMMERCE CLAUSE JURISPRUDENCE AND THE DEVELOPMENT OF THE COMPENSATORY TAX DOCTRINE

The Commerce Clause of the U.S. Constitution provides that "the Congress shall have Power . . . to regulate commerce . . . among the several States."⁶⁷ Although phrased as an affirmative grant of power to Congress, the Commerce Clause has long been recognized to have a negative aspect which denies states the power to discriminate against, or burden, interstate commerce.⁶⁸ A variety of reasons are given for this negative aspect of the Commerce Clause (called the "dormant Commerce Clause"); two are of particular interest here.⁶⁹ First, it prohibits economic protectionism by the states—that is, regulatory measures designed to benefit in-state economic interests by burdening out-of-state competitors.⁷⁰ Second, it promotes economic

⁶⁴ See U.S. CONST. art. I, § 8, cl. 3; *Or. Waste Sys., Inc. v. Dep't of Envtl. Quality*, 511 U.S. 93, 99 (1994) (holding that state laws placing burdens on interstate commerce are subject to challenge based on the Commerce Clause of the U.S. Constitution); Robert B. McKinstry, Jr., *Laboratories for Local Solutions for Global Problems: State, Local and Private Leadership in Developing Strategies to Mitigate the Causes and Effects of Climate Change*, 12 PENN ST. ENVT'L. L. REV. 15, 67 (2004) (noting potential Commerce Clause challenges to state and regional regulatory programs).

⁶⁵ See U.S. CONST. art. I, § 8, cl. 3; *Or. Waste*, 511 U.S. at 99; McKinstry, *supra* note 64, at 67.

⁶⁶ See *infra* notes 190–272 and accompanying text; see also Kirsten H. Engel, *The Dormant Commerce Clause Threat to Market-Based Environmental Regulation: The Case of Electricity Deregulation*, 26 *ECOLOGY L.Q.* 243, 250–52 (1999) (noting the Commerce Clause objections to market-based environmental regulation and arguing that such regulation should be upheld based on the logic of the market participant exception and because it promotes economic efficiency and interstate harmony, and is not motivated by economic protectionism).

⁶⁷ U.S. CONST. art. I, § 8, cl. 3.

⁶⁸ See *Fulton Corp. v. Faulkner*, 516 U.S. 325, 330 (1996); *Or. Waste Sys., Inc. v. Dep't of Envtl. Quality*, 511 U.S. 93, 98–99 (1994).

⁶⁹ See *Fulton*, 516 U.S. at 330; *Or. Waste*, 511 U.S. at 98–99.

⁷⁰ *Fulton*, 516 U.S. at 330 (quoting *Assoc. Indus. of Mo. v. Lohman*, 511 U.S. 641, 647 (1994)).

efficiency that would be undone if states were free to place burdens on the flow of commerce across their borders.⁷¹ The Supreme Court has stated that in granting Congress authority over interstate commerce, the Framers sought "to avoid tendencies toward the economic Balkanization that had plagued relations among the colonies and later among the states under the Articles of Confederation."⁷²

The first step in evaluating the constitutionality of a state law under dormant Commerce Clause jurisprudence is to determine whether the challenged statute regulates evenhandedly with only "incidental" effects on interstate commerce, or discriminates against interstate commerce either on its face or in practical effect.⁷³ Where the regulation is "evenhanded" and the effects are "incidental," the statute will be upheld if the regulation passes the *Pike v. Bruce Church, Inc.* balancing test.⁷⁴ This test examines whether: (1) the law effectuates a legitimate local purpose, (2) the burden imposed on interstate commerce is not clearly excessive in relation to the putative local benefits, and (3) there are alternative means for promoting the local purpose as well without discriminating against interstate commerce.⁷⁵ Where, however, the state regulation is discriminatory, meaning that it provides differential treatment of in-state and out-of-state interests, it is virtually per se invalid.⁷⁶ The regulation's proponent will only overcome the per se rule of invalidity if it can show that the regulation advances a legitimate local purpose that cannot be adequately served by reasonable nondiscriminatory alternatives.⁷⁷ Facial discrimination by itself may be a fatal defect, and invokes the strictest scrutiny of any purported legitimate local purpose and of the absence of nondiscriminatory alternatives.⁷⁸

⁷¹ See *Or. Waste*, 511 U.S. at 98-99.

⁷² *Hughes v. Oklahoma*, 441 U.S. 322, 325-26 (1979).

⁷³ See *Fulton*, 516 U.S. at 331; *Or. Waste*, 511 U.S. at 99; *Hughes*, 441 U.S. at 336.

⁷⁴ See 397 U.S. 137, 142 (1970).

⁷⁵ See *id.*

⁷⁶ See *Fulton*, 516 U.S. at 331; *Or. Waste*, 511 U.S. at 99.

⁷⁷ See *Or. Waste*, 511 U.S. at 100-01 (quoting *New Energy Co. of Ind. v. Limbach*, 486 U.S. 269, 278 (1988)); *Hughes*, 441 U.S. at 336; see also *Maine v. Taylor*, 477 U.S. 131, 151-52 (1986) (upholding a facially discriminatory law banning the importation of out-of-state bait fish into Maine because the fish were subject to parasites completely foreign to Maine baitfish and could jeopardize the health of the Maine fish population, and no nondiscriminatory alternatives existed).

⁷⁸ See *Or. Waste*, 511 U.S. at 99; *Hughes*, 441 U.S. at 337; see also Justin M. Nesbit, Note, *Commerce Clause Implications of Massachusetts' Attempt to Limit the Importation of "Dirty" Power in the Looming Competitive Retail Market for Electricity Generation*, 38 B.C. L. Rev. 811, 842 (1997) (concluding that an outright ban on imported power would likely be invalidated under the

The hybrid regulatory approach described above could be challenged as a facially discriminatory regulation because the regulation covering LSEs only regulates emissions associated with imported electricity and therefore expressly treats in-state and out-of-state interests differently.⁷⁹ The LSE regulation imposes burdens on electricity crossing state lines only.⁸⁰ Therefore it burdens out-of-state generators wishing to sell into the RGGI region, but does not *itself* impose the same burdens on in-state generators.⁸¹ Thus, the regulation would most likely be subject to strict scrutiny under the dormant Commerce Clause.⁸²

A. *An Exception to the Dormant Commerce Clause Rule of Invalidity:
The Compensatory Tax Doctrine*

The U.S. Supreme Court has recognized a narrow exception to the per se rule of invalidity for facially discriminatory regulations, in the form of the compensatory tax doctrine.⁸³ Under the compensatory tax doctrine, a facially discriminatory regulation may survive strict scrutiny if it is a compensatory tax designed merely to make interstate commerce bear a burden already borne by intrastate commerce.⁸⁴ Although often expressed as an independent doctrine unto itself, the compensatory tax doctrine is merely a specific way of justifying a facially discriminatory tax because it achieves a legitimate local purpose that cannot be achieved through nondiscriminatory means.⁸⁵

The Supreme Court laid the groundwork for the compensatory tax doctrine in the 1869 case of *Hinson v. Lott*.⁸⁶ In *Hinson*, the state of Alabama imposed a tax on all liquor imported into the state equal to the tax imposed on all liquor distilled within the state.⁸⁷ The Supreme Court stated that the tax on imported liquor was merely a complementary provision necessary to make the tax equal on all liquors sold

Commerce Clause but that a surcharge on sales of "dirty" electricity could pass the *Pike* balancing test).

⁷⁹ See *Fulton*, 516 U.S. at 331; *Or. Waste*, 511 U.S. at 99.

⁸⁰ See *supra* notes 56–66 and accompanying text; see also *Armco, Inc. v. Hardesty*, 467 U.S. 638, 644 (1984) (finding that wholesale tax imposed only on imported goods burdened interstate commerce).

⁸¹ See *supra* notes 56–66 and accompanying text.

⁸² See *Fulton*, 516 U.S. at 331; *Or. Waste*, 511 U.S. at 99.

⁸³ See *Fulton*, 516 U.S. at 331; *Or. Waste*, 511 U.S. at 102.

⁸⁴ See *Fulton*, 516 U.S. at 331 (quoting *Lohman*, 511 U.S. at 647).

⁸⁵ See *Or. Waste*, 511 U.S. at 102.

⁸⁶ See 75 U.S. 148, 153 (1869).

⁸⁷ *Id.* at 150.

in the state.⁸⁸ Therefore, the Court held that this was not an attempt to regulate commerce, but an appropriate and legitimate exercise of the state's taxing power.⁸⁹

Since *Hinson*, the Court has more clearly defined and significantly limited the compensatory tax doctrine through a line of cases beginning in 1937 with *Henneford v. Silas Mason* and culminating in the decision of *Fulton Corp. v. Faulkner* in 1996.⁹⁰ Modern application of the compensatory tax doctrine involves a three-part test set out in 1994 in *Oregon Waste Systems v. Department of Environmental Quality of the State of Oregon* and refined in *Fulton Corp.*⁹¹ The three conditions necessary for a valid compensatory tax are: (1) a state must identify the intrastate burden for which the state is attempting to compensate; (2) the tax on interstate commerce must be shown roughly to approximate—but not to exceed—the amount of the tax on intrastate commerce; and (3) the events on which the interstate and intrastate taxes are imposed must be substantially equivalent—that is, they must be substantially similar in substance to serve as mutually exclusive proxies for each other.⁹² Given the relatively short life and limited application of the formalized three-part test, it is necessary to examine earlier cases, which address each of the prongs only implicitly, to analyze the compensatory tax doctrine fully.⁹³

B. The History of the Compensatory Tax Doctrine

1. *Henneford v. Silas Mason*: Formal Validation of the Compensatory Tax

Nearly seventy years after its decision in *Hinson*, the Supreme Court formally recognized the validity of a "compensating tax" in 1937 in *Henneford v. Silas Mason*.⁹⁴ In *Silas Mason*, the State of Washington imposed two taxes, a 2% tax on retail sales and a compensating 2% tax on the privilege to use any article of tangible personal property within the state.⁹⁵ The use tax did not apply to articles for which a

⁸⁸ *Id.* at 153.

⁸⁹ *Id.*

⁹⁰ See *Fulton*, 516 U.S. at 332. See generally *Henneford v. Silas Mason Co.*, 300 U.S. 577 (1937).

⁹¹ See *Fulton*, 516 U.S. at 332–33; *Or. Waste*, 511 U.S. at 103.

⁹² See *Fulton*, 516 U.S. at 332–33.

⁹³ See *infra* notes 94–189 and accompanying text.

⁹⁴ See *Silas Mason*, 300 U.S. at 583–84; *Hinson*, 75 U.S. at 152–53.

⁹⁵ *Silas Mason*, 300 U.S. at 579.

tax equal to or greater than 2% had already been applied out-of-state.⁹⁶ The plaintiffs in *Silas Mason* brought machinery, materials and supplies into Washington that were purchased at retail in other states for use on the construction of a dam on the Columbia River.⁹⁷ Washington assessed a use tax on the items because they had not been subject to a sales tax out of state.⁹⁸

The Court first acknowledged that the regulatory scheme was discriminatory on its face; the tax would never be payable on items purchased within the State of Washington because those items would be subject to a sales tax.⁹⁹ The burden of paying the use tax, however, was imposed equally on residents and non-residents who used their property within the state.¹⁰⁰ The Court noted that when the account was made up, the stranger from afar was subject to no greater burdens as a consequence of ownership than the dweller within the gates.¹⁰¹ The Court reasoned that while one paid upon one activity or incident, and the other upon another, the sum was the same.¹⁰² This reasoning implied that the sale and use of articles within the state were substantially similar events because the burdens fell on similarly described people—those taxpayers using articles in the state—and the taxes were therefore functionally equivalent.¹⁰³ The Court concluded that the scheme was not an unlawful burden on interstate commerce because it did not in fact burden commerce; it did not place a greater burden on goods purchased outside the state than those purchased inside the state.¹⁰⁴ The Court also rejected the proposition that the scheme amounted to protectionism of local retailers.¹⁰⁵ Because the tax was imposed on use, rather than import of the goods, and there was equality in the laying of the tax, there was no protectionism.¹⁰⁶

⁹⁶ *Id.* at 580–81.

⁹⁷ *Id.* at 579.

⁹⁸ *Id.*

⁹⁹ *See id.* at 581.

¹⁰⁰ *See Silas Mason*, 300 U.S. at 583–84.

¹⁰¹ *Id.* at 584.

¹⁰² *Id.*

¹⁰³ *See id.* at 584–85. This reasoning also implied that the State of Washington had a legitimate sovereign interest in taxing the use of property within the state once commerce was at an end. *See id.* at 582.

¹⁰⁴ *See id.* at 584–85.

¹⁰⁵ *Silas Mason*, 300 U.S. at 586–87.

¹⁰⁶ *See id.*

2. *Maryland v. Louisiana*: Rejection of the "First-Use" Tax

Since the Supreme Court's validation of the compensatory use tax in *Silas Mason*, it has steadfastly refused to apply the compensatory tax doctrine to areas outside the realm of sales and use taxes.¹⁰⁷ For example, in its 1981 decision in *Maryland v. Louisiana*, the Supreme Court struck down a Louisiana "first use" tax imposed on any natural gas imported into the state that was not subject to taxation by another state.¹⁰⁸ In effect this tax meant that only gas from the outer continental shelf (the "OCS")—an area of ocean that lies beyond state, but within federal, boundaries—was subject to the tax.¹⁰⁹ The tax imposed was equal to the severance tax the state imposed on gas producers in the state.¹¹⁰ Because of numerous tax exemptions and credits, however, the net effect of the tax scheme was to tax OCS gas moving through and eventually out of the state but not to tax Louisiana consumers of OCS gas.¹¹¹

As an initial matter, the Court addressed the State of Louisiana's claim that the taxable "uses" within the state broke the flow of commerce and were wholly local events, subject to state regulation.¹¹² The Court rejected this reasoning, stating that gas crossing a state line at any stage of its movement to the ultimate consumer was in interstate commerce during the entire journey from the wellhead to the consumer, even though interrupted by certain events within a particular state.¹¹³

Finding the tax scheme facially discriminatory towards interstate commerce, the Court set out to determine whether it could be upheld as a compensatory tax under *Silas Mason*.¹¹⁴ The Court held that the compensatory tax doctrine requires identification of the burden for which the state is attempting to compensate.¹¹⁵ Louisiana claimed that it was attempting to compensate for the burden of the severance tax on local production of natural gas.¹¹⁶ The Court rejected this ar-

¹⁰⁷ See *Fulton*, 516 U.S. at 342 (noting that the court has consistently declined to extend the compensatory exception beyond sales and use taxes); see also *Or. Waste*, 511 U.S. at 105; *Armco*, 467 U.S. at 644; *Maryland v. Louisiana*, 451 U.S. 725, 760 (1981).

¹⁰⁸ 451 U.S. at 731, 760.

¹⁰⁹ *Id.*

¹¹⁰ *Id.*

¹¹¹ *Id.* at 733.

¹¹² *Louisiana*, 451 U.S. at 754-55.

¹¹³ *Id.* at 755-56.

¹¹⁴ See *id.* at 756, 758.

¹¹⁵ *Id.* at 758.

¹¹⁶ *Id.*

gument, stating that although Louisiana has an interest in protecting its natural resources and therefore could impose a severance tax on domestic producers, it had no comparable sovereign interest in being compensated for the severance of resources from land outside its boundaries.¹¹⁷ Therefore, the first-use tax could not have been designed to meet the same ends as the severance tax—it could not have been designed to protect Louisiana's natural resources.¹¹⁸ The Court said that the "use" of gas and severance of gas could not be considered "substantially equivalent events," reasoning implicitly that because the burden of the two taxes fell on differently described taxpayers (in-state producers and out-of-state consumers) and did not meet the same ends, the taxes were not functionally equivalent.¹¹⁹ The Court differentiated these circumstances from the case of sales and use taxes, where a state attempts to ensure uniform treatment of goods to be consumed in the state by imposing taxes on substantially similar events occurring wholly within the state.¹²⁰

The Court concluded that the common thread running through the cases upholding compensatory taxes was equality of treatment between local and interstate commerce.¹²¹ Because the pattern of credits and exemptions principally burdened gas moving out of state, the tax was not a valid compensatory tax.¹²²

3. *Armco, Inc. v. Hardesty*: An Emphasis on Substantially Equivalent Events

The Supreme Court zeroed in on the notion of substantially equivalent events in 1984 in *Armco v. Hardesty*.¹²³ In that case the Court struck down a tax imposed by West Virginia on gross receipts of tangible property sold at wholesale.¹²⁴ The Court found the regulation to be facially discriminatory because it exempted local manufacturers from the tax.¹²⁵ West Virginia defended the tax, which was 0.27% of the wholesale price, as a compensatory tax for the far higher 0.88%

¹¹⁷ *Louisiana*, 451 U.S. at 759.

¹¹⁸ *Id.*

¹¹⁹ *See id.*

¹²⁰ *Id.*

¹²¹ *Id.*

¹²² *See Louisiana*, 451 U.S. at 759–60.

¹²³ *See* 467 U.S. at 643.

¹²⁴ *Id.* at 640, 646.

¹²⁵ *See id.* at 642.

manufacturing tax on local manufacturers.¹²⁶ The Court rejected the argument, holding that manufacturing and wholesale were not substantially similar events.¹²⁷ The Court noted that the manufacturing tax was not reduced when the goods were sold out of state, providing evidence that the tax was in fact a manufacturing tax and not a proxy for the gross receipts tax imposed on wholesalers from out of state.¹²⁸ In addition, the Court found that it would be impossible to determine which portion of the manufacturing tax was attributable to manufacturing and which portion to sales, and therefore it would be impossible to do an accounting to determine whether the tax on intrastate commerce roughly approximated the alleged compensating tax on interstate commerce.¹²⁹

The Court also noted that when the two taxes were considered together, discrimination against interstate commerce persisted because there was no exception in the wholesale tax regulation for manufacturers who had already paid a manufacturing tax in their home state.¹³⁰ If the scheme were upheld, manufacturers from out of state would pay both a manufacturing tax and a wholesale tax, while a West Virginia resident would pay only a manufacturing tax.¹³¹ The Court indicated that this would clearly violate the anti-protectionist purposes of the Commerce Clause.¹³²

C. *The Modern Compensatory Tax Doctrine and the Three-Part Test*

1. *Oregon Waste Systems, Inc. v. Department of Environmental Quality of the State of Oregon*: The Three-Part Test Established

The Supreme Court set out the three elements of the compensatory tax doctrine distinctly for the first time in 1994 in *Oregon Waste Systems, Inc. v. Department of Environmental Quality of the State of Oregon*.¹³³ In that case, an Oregon-based solid waste disposal company challenged an Oregon regulation that imposed a \$2.25-per-ton surcharge on out-of-state waste disposed of at landfills within Oregon.¹³⁴

¹²⁶ See *id.*

¹²⁷ *Id.* at 643.

¹²⁸ *Armco*, 467 U.S. at 643.

¹²⁹ *Id.*

¹³⁰ *Id.* at 644.

¹³¹ *Id.*

¹³² See *id.*

¹³³ See *Or. Waste*, 511 U.S. at 103.

¹³⁴ *Id.* at 96-97.

The Oregon-based company regularly shipped waste from neighboring Washington into Oregon for disposal.¹³⁵ The Oregon Supreme Court upheld the surcharge as a compensatory fee with an express nexus to actual costs incurred by state and local governments associated with disposing of the waste.¹³⁶ The U.S. Supreme Court reversed and invalidated the surcharge.¹³⁷

The Court held that because the rule was facially discriminatory, it was *per se* invalid unless it advanced a legitimate local purpose that could not be adequately served by reasonable nondiscriminatory alternatives.¹³⁸ The Court began by recognizing the settled principle that interstate commerce may be made to "pay its way" and that "[i]t was not the purpose of the commerce clause to relieve those engaged in interstate commerce from their just share of state . . . burdens."¹³⁹ The Court noted that since *Hinson v. Lott* in 1869 the compensatory tax doctrine had been used to express these principles, while also ensuring that no state exacts more than a just share from interstate commerce, which is a central purpose of the Commerce Clause.¹⁴⁰

The Court set out the first and second prongs of the compensatory tax analysis requiring the state to (1) identify the intrastate burden for which the state is attempting to compensate and (2) show that the burden on interstate commerce roughly approximated, but did not exceed, the burden on intrastate commerce.¹⁴¹ Applying these two requirements, the Court held that Oregon's failure to identify a *specific* compensating charge on intrastate commerce equal to or exceeding the surcharge was fatal to its claim.¹⁴² Oregon claimed that the surcharge compensated for general taxes paid by Oregon residents who disposed of in-state waste.¹⁴³ The Court rejected this claim because it was impossible to determine which portion of the general taxes were attributable to the disposal of waste, and therefore the Court could not determine whether the two burdens were roughly equivalent.¹⁴⁴ Accordingly, the state failed the first two prongs of the analysis.¹⁴⁵

¹³⁵ *Id.* at 97.

¹³⁶ *Id.*

¹³⁷ *Id.* at 98.

¹³⁸ *Or. Waste*, 511 U.S. at 99.

¹³⁹ *Id.* at 102 (citations omitted); see also *Louisiana*, 451 U.S. at 753.

¹⁴⁰ See *Or. Waste*, 511 U.S. at 102.

¹⁴¹ See *id.* at 103.

¹⁴² *Id.* at 104.

¹⁴³ *Id.*

¹⁴⁴ See *id.*

¹⁴⁵ See *Or. Waste*, 511 U.S. at 104.

The Court further stated that even if it were possible to calculate the portion of the general taxes that contributed to an intrastate burden roughly equivalent to the interstate burden, the surcharge would still be invalid because the general tax and the surcharge were not imposed on substantially equivalent events.¹⁴⁶ Thus, the surcharge also violated the third prong of the analysis.¹⁴⁷ Under the "equivalent events" analysis, the Court reasoned that earning income and disposing of waste were even less equivalent than wholesale and manufacturing, which were found not to be substantially equivalent in *Armco*.¹⁴⁸ The court reasoned implicitly that the two taxes were not designed to meet the same ends, because income taxes cover far more than disposal of waste and the two could not be functionally equivalent to each other.¹⁴⁹ Moreover, the fact that Oregon-based shippers of out-of-state waste were charged the surcharge *and* income tax refuted the argument that the events were substantially (or functionally) equivalent.¹⁵⁰ The Court noted that the prototypical example of substantially equivalent events is the sale and use of articles within the state and that the only compensatory taxes upheld had been use taxes on products purchased out of state.¹⁵¹ The Court refused to weigh comparative burdens imposed on dissimilar events.¹⁵²

2. *Fulton Corp. v. Faulkner*: The Modern Test Summarized

The modern embodiment of the compensatory tax doctrine was summarized most recently in *Fulton Corp. v. Faulkner* in 1996.¹⁵³ The case involved an "intangibles tax" on the fair market value of corporate stock owned by North Carolina residents.¹⁵⁴ Residents were entitled to take a deduction equal to the fraction of the issuing corporation's income that was subject to tax in North Carolina.¹⁵⁵ Therefore, if a resident owned stock in an in-state corporation the stock was not subject to the tax because the taxable percentage deduction was 100%, but stock in an out-of-state corporation was subject to the

¹⁴⁶ See *id.*

¹⁴⁷ See *id.* at 103.

¹⁴⁸ See *id.* at 105; *Armco*, 467 U.S. at 643.

¹⁴⁹ See *Or. Waste*, 511 U.S. at 104-05.

¹⁵⁰ See *id.* at 105.

¹⁵¹ *Id.*

¹⁵² See *id.*

¹⁵³ See 516 U.S. at 332-33.

¹⁵⁴ *Id.* at 327.

¹⁵⁵ *Id.* at 327-28.

tax.¹⁵⁶ Therefore, the Court first determined that the regulatory scheme was facially discriminatory.¹⁵⁷

The Supreme Court again recognized that there may be cases where a facially discriminatory tax may be upheld if the combined effect of the multi-tax scheme is to subject intrastate and interstate commerce to equivalent burdens.¹⁵⁸ The Court then reiterated the three conditions necessary for a valid compensatory tax: (1) a state must identify the intrastate burden for which the state is attempting to compensate; (2) the tax on interstate commerce must be shown roughly to approximate—but not to exceed—the amount of the tax on intrastate commerce; and (3) the events on which the interstate and intrastate taxes are imposed must be so substantially similar in substance as to serve as mutually exclusive proxies for each other.¹⁵⁹

To meet its burden under the first prong, North Carolina argued that the taxable percentage deduction (i.e. the tax on out-of-state stock interests) compensated for the burden of the general corporate income tax paid by corporations doing business in North Carolina.¹⁶⁰ The Court rejected this argument, holding that in addition to merely identifying the intrastate burden for which it seeks to compensate, the state must also show that the intrastate tax serves some purpose for which the state may otherwise impose a burden on interstate commerce.¹⁶¹ The Court held that because North Carolina had no general sovereign interest in taxing income earned out of state, it would fail the first prong of the analysis unless the state could identify some in-state activity or benefit to justify the compensatory tax.¹⁶² North Carolina attempted to cure this deficiency by pointing out that the out-of-state corporations benefited from the use of the state's capital markets without paying corporate income tax and that the intangible tax compensated for this loss.¹⁶³ The Court declined to create a precedent that would allow the imposition of a tax on entities involved in interstate commerce any time they happened to use facilities supported by general state tax funds.¹⁶⁴

¹⁵⁶ *Id.* at 328.

¹⁵⁷ *Id.* at 333.

¹⁵⁸ *Fulton*, 516 U.S. at 331.

¹⁵⁹ *Id.* at 332–33.

¹⁶⁰ *See id.* at 334.

¹⁶¹ *See id.*

¹⁶² *Id.*

¹⁶³ *Fulton*, 516 U.S. at 334–35.

¹⁶⁴ *See id.* at 335.

Under the second prong of the analysis, the Court in *Fulton* addressed the problem of interstate burdens that are imposed as a compensatory measure for generally defined intrastate burdens.¹⁶⁵ The second prong requires that the burden on interstate commerce be shown roughly to approximate, but not exceed, the amount of the burden on intrastate commerce.¹⁶⁶ North Carolina justified the intangibles tax and corresponding taxable percentage deduction as a measure for maintenance of the capital market for the shares of both foreign and domestic corporations.¹⁶⁷ The Court noted that the tax for which the state purported to compensate was a general corporate income tax that paid for a wide range of things, including construction and maintenance of a transportation network, institutions to educate a workforce, and local fire and police protection.¹⁶⁸ The state could not say what percentage of that general tax was allocated to support the capital market and whether that proportion was greater or smaller than the one imposed on interstate commerce by the intangibles tax.¹⁶⁹ The Court emphasized the point made in *Oregon Waste*, namely that it is generally unwilling to make the complex quantitative assessments required by the compensatory tax doctrine when general forms of taxation are involved.¹⁷⁰ The Court confirmed its unwillingness to permit discriminatory taxes on interstate commerce to compensate for charges purportedly included in general forms of intrastate taxation.¹⁷¹

In addressing the third prong of the analysis, the Court noted that recent decisions expressed an extreme reluctance to recognize new compensatory categories outside the sales/use tax combination recognized in *Silas Mason*.¹⁷² The third prong requires that the compensating burdens fall on "substantially equivalent events."¹⁷³ The Court explained that to meet this requirement the taxed activities must be sufficiently similar in substance to serve as mutually exclusive proxies for each other and that the two taxes must be functionally equivalent.¹⁷⁴ The Court held that actual incidence of the tax upon the same class of taxpayers is a necessary precondition for a valid

¹⁶⁵ See *id.* at 337-38.

¹⁶⁶ *Id.* at 336.

¹⁶⁷ See *id.* at 338.

¹⁶⁸ See *Fulton*, 516 U.S. at 337.

¹⁶⁹ *Id.* at 338.

¹⁷⁰ See *id.* (citing *Or. Waste*, 511 U.S. at 105 n.8).

¹⁷¹ *Fulton*, 516 U.S. at 338 (quoting *Or. Waste*, 511 U.S. at 105 n.8).

¹⁷² *Fulton*, 516 U.S. at 338.

¹⁷³ *Id.*

¹⁷⁴ See *id.* at 339 (quoting *Or. Waste*, 511 U.S. at 103).

compensatory tax, reasoning that if the burden falls on differently described entities then the taxes cannot be functionally equivalent.¹⁷⁵ The Court recognized that the ultimate distribution of burdens may be different from the statutory distribution of burdens, particularly when the nominal taxpayer can pass the burden to other parties, such as consumers.¹⁷⁶ The Court held that a state defending a compensatory tax scheme has the burden of showing that, at a minimum, the actual incidence of the two burdens is such that the real taxpayers are within the same class, so that a finding of combined neutrality as to interstate commerce is at least possible.¹⁷⁷

North Carolina argued that because corporate earnings influence the price of stock, the intangibles tax and the income tax are essentially taxing the same event.¹⁷⁸ The Court held that this was insufficient, and that the difference between the parties on which the taxes fell was of great significance.¹⁷⁹ The Court noted that in *Silas Mason*, the use tax was acceptable because the effect of the regulatory regime was to help in-state retailers to compete on terms of equality with retailers in other states who are exempt from a sales tax or other corresponding burden.¹⁸⁰ In *Silas Mason*, all taxpayers using their property within the state bore an equal burden whether paying a use tax or a sales tax.¹⁸¹ This equality did not exist in *Fulton* because the allegedly compensating taxes fell on taxpayers who were differently described.¹⁸² The income tax paid by corporations doing business in the state would be reflected in the stock price, and the actual burden of the tax would be borne by other parties such as consumers of the corporations' products.¹⁸³ By contrast, the Court stated, it was unlikely that the stock price of corporations doing business outside the state would reflect the impact of the incidence tax because North Carolina investors make up a small por-

¹⁷⁵ See *Fulton*, 516 U.S. at 340.

¹⁷⁶ *Id.* at 341.

¹⁷⁷ *Id.* at 340. The Court noted that a finding that the burden falls on the same class of taxpayers is a condition precedent for a finding that the two taxes are complementary, and declined to decide whether mere incidence is sufficient to compel the conclusion that the two burdens fall on substantially equivalent events. *Id.* at 340 n.6 (citing *Armco*, 467 U.S. at 643).

¹⁷⁸ See *Fulton*, 516 U.S. at 339.

¹⁷⁹ *Id.* at 340.

¹⁸⁰ See *id.* at 340 (citing *Silas Mason*, 300 U.S. at 581).

¹⁸¹ See *Fulton*, 516 U.S. at 340.

¹⁸² See *id.*

¹⁸³ See *id.* at 343.

tion of the national market.¹⁸⁴ Thus, the economic incidence of that tax would fall on the resident shareholder.¹⁸⁵

The Court noted that the objective of the "equivalent event" requirement is to enable in-state and out-of-state businesses to compete on equal footing.¹⁸⁶ The combination of the two tax schemes violated this objective because the actual incidence of the intangibles tax fell squarely on the shareholder and thus encouraged North Carolina investors to favor investment in corporations doing business within the state.¹⁸⁷ The Court stated that the compensatory tax doctrine is fundamentally concerned with equalizing competition between in-staters and out-of-staters.¹⁸⁸ The Court cautioned, however, that the difficulty in comparing the economic incidence of allegedly complementary tax schemes on different taxpayers and different transactions leads to the conclusion that courts will be unable to evaluate equivalency outside the context of traditional sales/use taxes.¹⁸⁹

III. APPLYING COMMERCE CLAUSE JURISPRUDENCE TO THE PROBLEM OF LEAKAGE

Although addressing climate change at the state and regional levels is certainly suboptimal, it could eventually have important effects on national policy.¹⁹⁰ Individual state actions create a patchwork of policies around the country that is both inefficient for businesses and risky for the acting states, which risk driving business out of state.¹⁹¹ This patchwork, however, often inspires the regulated community to lobby the federal government for national action.¹⁹² In addition, states can serve as laboratories for experimenting with various regulatory options to determine the best model for national action.¹⁹³

¹⁸⁴ *Id.*

¹⁸⁵ *Id.*

¹⁸⁶ *Fulton*, 516 U.S. at 340.

¹⁸⁷ *See id.* at 343.

¹⁸⁸ *See id.* at 342 n.8.

¹⁸⁹ *See id.*

¹⁹⁰ M.J. Bradley & Associates, *supra* note 22, at 2.

¹⁹¹ *Id.*

¹⁹² *See id.* at 4.

¹⁹³ *See New State Ice Co. v. Liebmann*, 285 U.S. 262, 311 (1932) (Brandeis, J., dissenting) ("There must be power in the states and the nation to remould, through experimentation, our economic practices and institutions to meet changing social and economic needs."); *see also McKinstry*, *supra* note 64, at 15-16 (noting that although states serve as laboratories for environmental policy change and often serve as a template for federal action, they face unique challenges).

RGGI may serve this experimental function well.¹⁹⁴ For these reasons the RGGI states should use every avenue available to them, including the compensatory tax doctrine, to protect the regulatory scheme from invalidation based on the Interstate Commerce Clause.¹⁹⁵

The compensatory tax doctrine may not be accepted by a court as applicable legal doctrine for emissions regulations because the burden imposed is not in the form of a tax.¹⁹⁶ As the Supreme Court noted in *Oregon Waste, Inc. v. Department of Environmental Quality of the State of Oregon*, however, the compensatory tax doctrine is merely a specific way of justifying a facially discriminatory tax that achieves a legitimate local purpose that cannot be achieved through nondiscriminatory means.¹⁹⁷ The RGGI states should therefore argue for the expansion of compensatory tax doctrine principles to cover important state and regional environmental regulations such as the RGGI program.¹⁹⁸

A regulatory approach that adequately addresses leakage may require a second regulation imposing a cap on the emissions associated with electricity imported into the region by LSEs.¹⁹⁹ This regulation would be passed after the implementation of the first cap on domestic electricity generators and only if it was determined that leakage was undermining the goals of the program.²⁰⁰ If the RGGI states decide to use this hybrid regulatory approach to address leakage, they should employ the compensatory tax doctrine to defend the scheme by arguing that the regulation of imported electricity is necessary to further a legitimate local purpose and that the combination of the two regulations is nondiscriminatory in effect.²⁰¹ The purpose of

¹⁹⁴ See M.J. Bradley & Associates, *supra* note 22, at 2; *supra* notes 1-8, 18-22 and accompanying text. In addition, if California adopts a different program for reduction of CO₂ emissions from that adopted by RGGI, the impact of the two programs on the national regulated community could be significant and force federal action. See M.J. Bradley & Associates, *supra* note 22, at 2; *supra* notes 1-8, 18-22 and accompanying text.

¹⁹⁵ See *supra* notes 190-194 and accompanying text.

¹⁹⁶ See *supra* note 107 and accompanying text.

¹⁹⁷ See 511 U.S. 93, 102 (1994).

¹⁹⁸ See *id.*; *supra* notes 190-194 and accompanying text.

¹⁹⁹ See *supra* notes 57-63 and accompanying text.

²⁰⁰ See *supra* notes 57-63 and accompanying text.

²⁰¹ See *Fulton Corp. v. Faulkner*, 516 U.S. 325, 342 (1996). There is an obvious distinction between a tax and a regulation limiting CO₂ emissions. See *supra* note 107 and accompanying text. The emissions cap does, however, ultimately impose burdens on generators of electricity that wish to participate in interstate commerce with the RGGI states. See *supra* notes 57-66 and accompanying text. This burden on electricity crossing regional borders is analogous to the burden imposed by the traditional taxes considered under the compensatory tax doctrine. See *supra* notes 57-66 and accompanying text.

the initial emissions regulation imposed on generators is to reduce CO₂ emissions associated with in-state electricity consumption in order to protect the state's interests in public health and welfare and preservation of natural resources.²⁰² The regulation of imported electricity through LSEs is a compensatory measure designed simply to make interstate commerce bear a burden already borne by intrastate commerce.²⁰³ In other words, the combination of the two regulations merely levels the playing field across all electricity generators serving the region.²⁰⁴ Because the LSE regulation is necessary to effectuate the purpose of the initial regulation, the combination of the two does not have a discriminatory effect, and is therefore a legitimate compensatory "tax" or burden on interstate commerce.²⁰⁵

A. *Application of the Compensatory Tax Doctrine to the Hybrid Approach*

Under the first step of the dormant Commerce Clause analysis, a court would likely determine that the second regulation imposed on LSEs does not regulate evenhandedly with only incidental effects on interstate commerce.²⁰⁶ Rather, because the LSE regulation only regulates emissions associated with electricity that crosses state lines while exempting domestically generated electricity, a court would likely de-

²⁰² See RGGI MoU, *supra* note 1, at 1; Regional Greenhouse Gas Initiative, About RGGI, <http://www.rggi.org/about.htm> (last visited Aug. 23, 2006).

²⁰³ See *Assoc. Indus. of Mo. v. Lohman*, 511 U.S. 641, 647 (1994).

²⁰⁴ See *supra* notes 43–63, 99–102 and accompanying text.

²⁰⁵ See *Fulton*, 516 U.S. at 330–31; *Or. Waste*, 511 U.S. at 99. One weakness of this argument is the availability of the total allocation-to-load regulatory option, which a court could deem to be a reasonable, less discriminatory alternative. See *supra* note 56. Although this regulation could still be subject to a Commerce Clause challenge because it places burdens on interstate commerce of electricity, it likely would not face the strict scrutiny test imposed on facially discriminatory regulations like the regulation that RGGI is now considering. See *supra* notes 73–77 and accompanying text. Rather, a court would likely find that it regulates evenhandedly with only "incidental" effects on interstate commerce because it does not differentiate between in-state and out-of-state interests. See CALIFORNIA REPORT, *supra* note 3, at 23 (noting that the total allocation-to-load approach generally treats in-state and out-of-state interests equally); *supra* notes 73–77 and accompanying text. A strong case could be made that a single load-based emissions cap that included both domestic and imported energy would pass the *Pike* balancing test because: (1) it would effectuate a legitimate local purpose—that of reducing greenhouse gases; (2) the burden imposed on interstate commerce would not be clearly excessive in relation to the putative local benefits; and (3) there are no alternative means for promoting the local purpose as well without discriminating against interstate commerce. See *Pike v. Bruce Church, Inc.*, 397 U.S. 137, 142 (1970).

²⁰⁶ See *Fulton*, 516 U.S. at 331; *Or. Waste*, 511 U.S. at 99; *Hughes v. Oklahoma*, 441 U.S. 322, 336 (1979).

termine that the regulation of imported electricity discriminates against interstate commerce on its face.²⁰⁷

As noted above, courts review facially discriminatory regulations under a strict scrutiny test based on the assumption that they are per se invalid.²⁰⁸ To overcome this assumption, the proponent of the regulation must show that the regulation advances a legitimate local purpose that cannot adequately be served by reasonable nondiscriminatory alternatives.²⁰⁹ This may be shown by applying the principles embodied in the three prongs of the compensatory tax doctrine.²¹⁰

1. Application of the First Prong of the Compensatory Tax Doctrine: Identifying the Intrastate Burden Requiring Compensation

Under the first prong of the compensatory tax doctrine, the RGGI states must identify the intrastate burden for which the regulation of emissions associated with electricity imports seeks to compensate.²¹¹ It is reasonable to assume that a court would accept the assertion that the states adopted the regulation in good faith as compensation for the domestic burden of the emission cap placed on in-state generators, rather than suspecting some ulterior motive.²¹² The states will also be required to show that the intrastate burden serves some purpose for which the state may otherwise impose a burden on interstate commerce.²¹³

One purpose of the intrastate burden on electricity generators is to protect the RGGI states' natural resources and public health by reducing CO₂ emissions associated with electricity consumption.²¹⁴ The

²⁰⁷ See *Fulton*, 516 U.S. at 333 (finding a statute that burdens interstate commerce but not intrastate commerce to be facially discriminatory); *Or. Waste*, 511 U.S. at 100 (stating that a law that taxes interstate activities more heavily is facially discriminatory); *supra* notes 56–63 and accompanying text; see also Kirsten H. Engel, *Mitigating Global Climate Change in the United States: A Regional Approach*, 14 N.Y.U. ENVTL. L.J. 54, 77–78 (2005) (concluding that an outright ban on importation of electricity would be a facially discriminatory Commerce Clause violation unless it was expressly authorized by Congress).

²⁰⁸ See *supra* notes 73–92 and accompanying text.

²⁰⁹ See *supra* notes 73–92 and accompanying text.

²¹⁰ See *supra* notes 83–92 and accompanying text.

²¹¹ See *Fulton*, 516 U.S. at 332; *Or. Waste*, 511 U.S. at 103.

²¹² See *Fulton*, 516 U.S. at 337 (expressing suspicion that the reason given for imposing an allegedly compensatory tax was illusory).

²¹³ See *Maryland v. Louisiana*, 451 U.S. 725, 759 (1981); see also *Fulton*, 516 U.S. at 334 (holding that North Carolina could not impose a tax on foreign corporations compensating for the burden of income tax on domestic corporations because North Carolina had no sovereign interest in taxing the income of a foreign corporation).

²¹⁴ See RGGI MoU, *supra* note 1, at 1.

RGGI states do not, however, have a sovereign interest in protecting other states' natural resources or public health and safety, and no court has yet held that a state has a legitimate interest in reducing global pollutants outside its borders.²¹⁵ Therefore, a court could invalidate the regulation because the intrastate burden that the generator regulation imposes serves a purpose for which the state may not otherwise burden interstate commerce.²¹⁶ Similarly, the Court in *Maryland v. Louisiana* rejected the argument that because the state imposed a severance tax on gas extracted from its own soil, it could impose a compensating first-use tax on imported gas.²¹⁷ The Court held that Louisiana had no sovereign interest in the severance of resources from land outside its borders, that the alleged compensating tax was invalid, and that the state had to identify an in-state activity in order to justify the first-use tax.²¹⁸

The LSE regulation that the RGGI states may impose, however, is unlike the Louisiana regulation in *Louisiana* because it is necessary to promote the states' legitimate interest while the Louisiana regulation was not.²¹⁹ In both *Louisiana* and *Fulton Corp. v. Faulkner*, the Court held that the state must identify an in-state activity or benefit to justify the compensatory levy, a task that neither of the states could do.²²⁰ The RGGI states, on the other hand, may be able to overcome the sovereign interest argument by showing that the regulation of emissions associated with imported electricity is necessary to carry out the purposes of the in-state regulation, and that the two regulations are designed to meet the same end.²²¹ The RGGI states should argue that the combination of the two regulations serves the legitimate local interest of protecting the natural resources and the health and welfare

²¹⁵ See *Louisiana*, 451 U.S. at 759; cf. *Massachusetts v. EPA*, 415 F.3d 50, 54–56 (D.C. Cir. 2005), *cert. granted*, 126 S. Ct. 2960 (2006). In *Massachusetts v. EPA*, Judge Randolph, writing for a three-judge panel of the U.S. Court of Appeals for the District of Columbia Circuit, assumed without deciding that a state has standing to bring an action based on the generalized grievance of harms associated with global warming. 415 F.3d at 54–56. Judge Sentelle, dissenting in part but concurring in the judgment, stated that the state did not have standing because it did not assert a specific harm associated with CO₂ emissions. *Id.* at 59–60 (Sentelle, J., dissenting in part but concurring in the judgment). Judge Tatel, dissenting, stated that the state did have standing, in part because it had successfully shown injury caused by global warming. *Id.* at 64 (Tatel, J., dissenting).

²¹⁶ See *Louisiana*, 451 U.S. at 759.

²¹⁷ See *id.*

²¹⁸ See *id.*

²¹⁹ See *id.* at 759; *supra* notes 43–63 and accompanying text.

²²⁰ See *Fulton*, 516 U.S. at 334; *Louisiana*, 451 U.S. at 759.

²²¹ See *Or. Waste*, 511 U.S. at 99; *Louisiana*, 451 U.S. at 759.

of their citizens, and that a regulatory scheme that places some burden on interstate commerce is necessary to effectuate that purpose.²²² If the states cannot regulate emissions from imported electricity, then the regulation of domestic emissions will not be effective.²²³ This argument thus directly addresses the requirement set out in *Louisiana* that the two regulations be designed to meet the same end, because both regulations are ultimately designed to protect the states' public health and natural resources.²²⁴ Based on this reasoning, the RGGI states could persuade a court that the regulation satisfies the first prong of the compensatory tax doctrine.²²⁵

2. Application of the Second Prong of the Compensatory Tax Doctrine: Equivalent Burdens on Interstate and Intrastate Commerce

The second prong of the compensatory tax analysis requires that the burden on interstate commerce roughly approximate, but not exceed, the burden on intrastate commerce.²²⁶ The RGGI states will not encounter the problems faced by states that sought to compensate for burdens imposed on intrastate commerce by general forms of taxation as Oregon did in *Oregon Waste* and North Carolina did in *Fulton*, because the LSE regulation compensates for a specific regulation focused on emissions from fossil fuel-fired generators, rather than a generally applicable resident taxation.²²⁷ The complexity of the accounting in the case of emissions trading, however, is sure to raise its own challenges.²²⁸

It is well-established that pure economic protectionism is not considered a legitimate local purpose under Commerce Clause juris-

²²² See *Maine v. Taylor*, 477 U.S. 131, 151–52 (1986) (upholding a facially discriminatory law banning the importation of out-of-state bait fish into Maine because the fish were subject to parasites completely foreign to Maine baitfish and could jeopardize the health of the Maine fish population, and no nondiscriminatory alternatives existed).

²²³ See *supra* notes 43–52 and accompanying text.

²²⁴ See *Louisiana*, 451 U.S. at 759.

²²⁵ See *supra* notes 211–224 and accompanying text.

²²⁶ See *supra* notes 141–145, 165–171 and accompanying text.

²²⁷ See *Fulton*, 516 U.S. at 338; *Or. Waste*, 511 U.S. at 104–05; *supra* notes 141–145, 165–171 and accompanying text.

²²⁸ See *Armco, Inc. v. Hardesty*, 467 U.S. 638, 643 (1984) (striking down an allegedly compensatory tax, in part because the court could not determine which part of the tax was meant to be compensatory); CALIFORNIA REPORT, *supra* note 3, at 21, 23 (discussing the current lack of a robust emissions-tracking system for LSEs); see also *Fulton*, 516 U.S. at 338; *Or. Waste*, 511 U.S. at 104–05.

prudence.²²⁹ Therefore, if a regulation had the effect of putting in-state generators at a competitive advantage over out-of-state generators, that regulation would be struck down.²³⁰ It is therefore critical that the RGGI states consider this issue from the beginning of the program if they intend to address the problem of leakage in the future.²³¹ Even under a regulatory scheme that only targets domestic generators, the RGGI states should set the initial cap on emissions for the region at a level that includes the emissions associated with historic imports on the same basis as historic in-region generation.²³² Under the second regulation, LSEs should receive allowance allocations on the same basis that generators are given allowances.²³³ Any inequality in the method by which allowances are distributed to LSEs for their imports as compared to domestic generators could lead a court to detect economic protectionism.²³⁴ The RGGI states must be able to show that the allocation of allowances to imported electricity under the second regulatory measure is nondiscriminatory because it is based on the same historic baseline as the allocation of allowances to domestic generators.²³⁵

Also critical to the defense of the regulation on imported electricity will be the method by which actual emissions associated with imported electricity and domestic generator emissions will be measured.²³⁶ If the methods used are not the same, then the states will run a greater risk of having the regulation of imported electricity struck down, because the court will not be able to weigh the burdens quanti-

²²⁹ See *Or. Waste*, 511 U.S. at 106 (citing *Wyoming v. Oklahoma*, 502 U.S. 437, 454 (1992) and *New Energy Co. of Ind. v. Limbach*, 486 U.S. 269, 275 (1988)); *Henneford v. Silas Mason*, 300 U.S. 577, 586 (1937).

²³⁰ See *Or. Waste*, 511 U.S. at 106; *Silas Mason*, 300 U.S. at 586.

²³¹ See CALIFORNIA REPORT, *supra* note 3, at 21–23. Because the initial phase of the program will only regulate in-region generators, the RGGI states must determine how to allocate the allowances associated with historic imports so as to avoid allocation problems later in the event that the regulation of imported electricity is required. See *id.* If the RGGI states allocate the entire cap of allowances including those associated with historic imports to generators during the initial phase of the program and leakage becomes a problem, then there will be the serious issue of reallocating those allowances associated with historic imports to the newly regulated LSEs. See *id.*; cf. *Armco*, 467 U.S. at 645 (rejecting an allegedly compensatory tax in part because it was unclear which part of the tax was intended to be compensatory).

²³² See CALIFORNIA REPORT, *supra* note 3, at 22–23; Cowart, *supra* note 7, at 5.

²³³ See CALIFORNIA REPORT, *supra* note 3, at 22–23; Cowart, *supra* note 7, at 5.

²³⁴ See *Fulton*, 516 U.S. at 338; *Or. Waste*, 511 U.S. at 104–05.

²³⁵ See *Fulton*, 516 U.S. at 338; *Or. Waste*, 511 U.S. at 104–05.

²³⁶ See *Fulton*, 516 U.S. at 338; *Or. Waste*, 511 U.S. at 104–05.

tatively.²³⁷ For example, if the states use actual emission rates for in-state generators because they are able to inspect those plants, but use assumed rates based on megawatt-hour output for imported electricity because they are unable to inspect out-of-state plants, a court could find that either the burdens were not equivalent or that it was too cumbersome to attempt to weigh them.²³⁸ For this reason, RGGI should use a common system of assigning CO₂ attributes to electricity for both generators and LSEs.²³⁹

Both the allocation of allowances and measurement of emissions will likely raise the sort of difficult quantitative questions that the Supreme Court has continually used to strike down compensatory regulations.²⁴⁰ For example, in *Armco, Inc. v. Hardesty*, the state attempted to impose a wholesale interstate tax to compensate for a manufacturing intrastate tax.²⁴¹ The Court complained that it could not determine what part of the manufacturing tax was attributable to manufacturing and what part to sales and therefore it struck down the burden on interstate commerce, even though the burden on intrastate activities was arguably the greater of the two.²⁴² To survive the second prong of the analysis, the RGGI states must ensure that the accounting of allowances and emissions reveals the actual burdens imposed and that the burden on interstate commerce is no greater than the burden on intrastate commerce.²⁴³

3. Application of the Third Prong of the Compensatory Tax Doctrine: Substantially Equivalent Events

Under the third prong of the compensatory tax doctrine, the RGGI states would be required to show that the events on which the

²³⁷ See *Fulton*, 516 U.S. at 342; *Or. Waste*, 511 U.S. at 105; *Armco*, 467 U.S. at 643.

²³⁸ See *Armco*, 467 U.S. at 643 (striking down an allegedly compensatory tax in part because the court could not determine what portion of the tax compensated for the in-state burden); CALIFORNIA REPORT, *supra* note 3, at 23 (noting the various difficulties associated with tracking emissions).

²³⁹ See *Fulton*, 516 U.S. at 342; *Or. Waste*, 511 U.S. at 105; *Armco*, 467 U.S. at 643. There is currently not a robust tracking system for LSEs to monitor emissions associated with electricity they deliver to customers. See CALIFORNIA REPORT, *supra* note 3, at 23. Options for developing a tracking system include relying on average emissions and requiring power contracts to include emissions data for electricity delivered. *Id.*

²⁴⁰ See *supra* notes 129, 142–144, 168–171 and accompanying text.

²⁴¹ See 467 U.S. at 643.

²⁴² See *Armco*, 467 U.S. at 643; see also *Or. Waste*, 511 U.S. at 104–05 (refusing to engage in the type of quantitative assessments that the compensatory tax doctrine requires).

²⁴³ See *Silas Mason*, 300 U.S. at 584; see also *Fulton*, 516 U.S. at 342; *Or. Waste*, 511 U.S. at 105; *Armco*, 467 U.S. at 643.

interstate and intrastate burdens fall are substantially equivalent; that is, they are sufficiently similar in substance to serve as mutually exclusive proxies for each other.²⁴⁴ The states should be able to show that emissions associated with imported electricity and emissions from domestically generated electricity serve as mutually exclusive proxies for each other because they are functionally equivalent.²⁴⁵ In *Louisiana*, the Court held that severance of natural gas and import of gas into the state for "use" were not comparable and no equality existed because the state was not ensuring uniform treatment of goods and materials to be consumed in the state.²⁴⁶ Instead, goods were burdened differently depending on whether or not they were destined for interstate commerce.²⁴⁷ By contrast, in the case of the regulations imposed on LSEs and in-state generators, the states are attempting to impose a burden on imported electricity equivalent to the burden on domestic electricity to ensure uniform treatment of electricity consumed in the state.²⁴⁸ This treatment is unlike that in *Louisiana*, but similar to that in *Henneford v. Silas Mason*, where the Court upheld the combination of the sales and use taxes because the regulations ensured uniform treatment of goods and the burden was imposed equally on residents and non-residents making use of goods within the state.²⁴⁹

Moreover, the burden of the two regulations falls on the same class of actors—either all generators selling to the state whether resident or non-resident, or ultimately on all consumers within the state—and thus the regulations are functionally equivalent.²⁵⁰ This is similar to the Court's reasoning in *Hinson v. Lott*, where it upheld a tax on each gallon of liquor imported into the state on the ground that it complemented a tax of equal magnitude on each gallon of liquor distilled in the state and was necessary to equalize competition between in-staters and out-of-staters.²⁵¹ Here, as in *Hinson*, the two "taxes" are functionally equivalent and therefore the two events serve as mutually exclusive proxies for each other.²⁵² The hybrid scheme is

²⁴⁴ See *Fulton*, 516 U.S. at 332–33.

²⁴⁵ See *id.*

²⁴⁶ See *supra* notes 114–122 and accompanying text.

²⁴⁷ See *supra* notes 114–122 and accompanying text.

²⁴⁸ See *supra* notes 114–122 and accompanying text.

²⁴⁹ See *Silas Mason*, 300 U.S. at 584; cf. *Louisiana*, 451 U.S. at 725.

²⁵⁰ See *Fulton*, 516 U.S. at 339–40.

²⁵¹ See *supra* notes 86–89 and accompanying text.

²⁵² See *supra* notes 86–89 and accompanying text; see also *Fulton*, 516 U.S. at 339; *Or. Waste*, 511 U.S. at 103.

unlike the scheme in *Fulton*, where the Court expressly found that the actual incidence of the burdens due to the corporate income tax and the intangibles tax fell on differently described taxpayers.²⁵³ The Court concluded that because one tax fell on domestic corporations while the other fell on individuals investing in out-of-state corporations, the two could not be functionally equivalent and the discriminatory regulation was invalid.²⁵⁴ By contrast, the burdens of the two regulations here fall on similarly described entities, those serving a state's electricity market and ultimately consumers within the state, and therefore the two burdens are functionally equivalent.²⁵⁵

As sensible as this argument seems, the fact remains that the Supreme Court has continuously refused to acknowledge any expansion of the compensatory tax doctrine beyond the sales and use tax category since its 1937 decision in *Silas Mason*.²⁵⁶ For example, in *Armco* the Court held that manufacturing and wholesale are not substantially similar events, reasoning that the taxes imposed on the two were not functionally equivalent to each other.²⁵⁷ The Court in *Fulton* stated: "*Hinson* does not alter our conclusion today that Courts will ordinarily be unable to evaluate the economic equivalence of allegedly complementary tax schemes that go beyond traditional sales/use taxes."²⁵⁸ It appears that the Court is largely unwilling to open the door to allowing facially discriminatory regulations as alleged compensatory regulations outside sales and use taxes because the quantitative evaluations required to determine whether the burdens are equivalent are too cumbersome.²⁵⁹ The principles embodied in the doctrine, however, are still of value to the RGGI states because they may form the foundation of an argument for upholding the regulation.²⁶⁰

For one, there is a critical distinction between the hybrid approach to regulating emissions and each of the allegedly compensatory taxes that the Court has struck down since *Silas Mason*.²⁶¹ In every other case the Court has found that the combination of regulations either did in effect, or had the potential to, favor domestic interests

²⁵³ See *supra* notes 173–189 and accompanying text.

²⁵⁴ See *supra* notes 173–189 and accompanying text.

²⁵⁵ See *supra* notes 173–189 and accompanying text; see also *Silas Mason*, 300 U.S. at 584.

²⁵⁶ See *Fulton*, 516 U.S. at 338 (emphasizing the Court's reluctance to extend the compensatory tax doctrine beyond the context of sales and use taxes).

²⁵⁷ See *supra* notes 123–132 and accompanying text.

²⁵⁸ *Fulton*, 516 U.S. at 342 n.8.

²⁵⁹ See *Fulton*, 516 U.S. at 342; *Or. Waste*, 511 U.S. at 105; *Armco*, 467 U.S. at 643.

²⁶⁰ See *supra* notes 210–255 and accompanying text.

²⁶¹ See *infra* notes 262–266 and accompanying text.

over out-of-staters.²⁶² By contrast, here it is assumed that the RGGI states will design a combination of regulations that do not favor domestically generated electricity over imported electricity.²⁶³ In *Louisiana*, the combined effect of the imposed tax and tax credit scheme was to burden only gas traveling out of state; therefore, the tax was invalidated.²⁶⁴ In *Fulton*, the regulations had the effect of encouraging North Carolinians to invest in domestic rather than out-of-state companies.²⁶⁵ By contrast, as was the case in *Silas Mason*, the RGGI regulations would have the effect of burdening all electricity consumed in the state equally and therefore should be upheld.²⁶⁶

It is also worth considering the words of the Court in *Armco* when evaluating the manufacturing and wholesale taxes.²⁶⁷ The Court noted that because no exception existed in the regulation for imported goods already subject to manufacturing tax in another state, the combination of the two regulations could have the effect of favoring domestic goods.²⁶⁸ If out-of-state generators are subject to emissions caps in their home states, then the LSE regulation will not further burden them because they will already be producing clean electricity and the regulation will not run into the *Armco* problem.²⁶⁹ Before implementing a hybrid approach, however, the RGGI states must consider whether the regulation on imported electricity requires some exceptions.²⁷⁰ For example, the regulation should account for other potential burdens associated with CO₂ emissions that are not imposed in the RGGI region but could be imposed in other states, such as CO₂ emissions taxes.²⁷¹ Taking this issue into account as well as the Court's approach to compensatory taxes, the RGGI states may be able to avoid invalidation of future attempts to address leakage.²⁷²

²⁶² See *Fulton*, 516 U.S. at 343; *Or. Waste*, 511 U.S. at 106; *Armco*, 467 U.S. at 644; *Louisiana*, 451 U.S. at 759.

²⁶³ See *supra* notes 226–243 and accompanying text.

²⁶⁴ See *Louisiana*, 451 U.S. at 759.

²⁶⁵ See *Fulton*, 516 U.S. at 343.

²⁶⁶ See *Silas Mason*, 75 U.S. at 154–55; *supra* notes 56–63 and accompanying text.

²⁶⁷ See *Armco*, 467 U.S. at 644.

²⁶⁸ See *id.*

²⁶⁹ See *id.*

²⁷⁰ See *id.*

²⁷¹ See *id.*; *supra* notes 56–63 and accompanying text.

²⁷² See *supra* notes 206–266 and accompanying text.

CONCLUSION

The ultimate solution to the problem of leakage is to implement a nationwide regulatory program for greenhouse gas emissions. Until that time, state regulators must do their best to combat global warming by implementing regional programs and to prevent leakage. If RGGI is committed to a supply-side regulatory scheme, there are several factors that should be considered before implementing a regulation that covers imported electricity through LSEs. In order to meet the requirements of the compensatory tax doctrine, the RGGI states must be able to show with absolute certainty that the combined effect of the regulations is to impose equal burdens on electricity to be consumed within the state—that the burden on interstate commerce is no greater than the burden on intrastate commerce.

The initial carbon dioxide emissions cap should be set at levels that include emissions associated with historic imports as well as historic in-state generation, to avoid difficult accounting of allowances in the second phase of the program. The RGGI states must also determine how to allocate allowances associated with historic imports during the phase of the program that only subjects in-state generators to regulation. The allocation of allowances must not favor in-state electricity generators.

The RGGI states must also determine how carbon emission attributes of imported electricity should be measured. The method used should be the same as the method used for measuring emissions associated with domestically generated electricity, to avoid any differential treatment of in-state and out-of-state generators that could invalidate the regulation.

Even if these precautions are taken by the RGGI states, there is still a substantial likelihood that a court would strike down the regulation of imported electricity through in-state LSEs as a violation of the dormant Commerce Clause. Faced with such a challenge, RGGI states should argue that the principles embodied in the compensatory tax doctrine should be applied to validate the regulatory scheme, because the scheme achieves a legitimate local purpose that cannot be achieved through nondiscriminatory means. First, the regulation of imported electricity compensates for the domestic burden caused by the emission cap placed on in-state generators. Second, the regulatory scheme places equal burdens on both in-state and out-of-state actors by placing them on equal footing with regard to emissions allowances. Third, the emissions associated with imported electricity and emissions from domestically-generated electricity serve as mutually exclu-

sive proxies for each other. A court reviewing the hybrid regulatory scheme should accordingly extend the applicability of this dormant Commerce Clause exception.

In the event that the RGGI program merely regulates in-region generators and does not address the problem of leakage, the program will still be a valuable tool. The action of the RGGI states, in combination with actions taken in other states such as California, may be the catalyst required to set a national movement in motion. At the very least, the RGGI program will inform other regulators around the country of the strengths, weaknesses, and potential pitfalls of a cap-and-trade program for regulating greenhouse gas emissions.

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