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THE REGIONAL GREENHOUSE GAS INITIATIVE AND CALIFORNIA ASSEMBLY BILL 1493: FILLING THE AMERICAN GREENHOUSE GAS REGULATION VOID

I. INTRODUCTION

Global warming is a distant relative of the pollution to which Americans have become accustomed. Carbon dioxide (“CO₂”), the chief pollutant that causes global warming,¹ will not blanket the horizon in clouds of smoke, nor will it poison our drinking water. In fact, scientists claim that increased levels of atmospheric CO₂ only raised the earth’s temperature approximately one degree Fahrenheit during the twentieth century.² To the uninformed, warmer weather always sounds desirable. A “growing consensus” of scientists, however, sees things differently.³ Many experts claim that this miniscule temperature shift has caused the earth’s climate to become increasingly volatile.⁴ Recent studies have shown that glacial melt in the arctic has picked up tremendously,⁵ super-charged hurricanes are becoming more common,⁶

1. The “greenhouse effect” is a natural phenomenon whereby “greenhouse gases—primarily carbon dioxide, methane, and nitrous oxide”—trap the sun’s heat inside the earth’s atmosphere. EPA: Global Warming—Climate, http://yosemite.epa.gov/OAR/global_warming.nsf/content/Climate.html (last visited Nov. 6, 2006). Global warming occurs when anthropogenically elevated levels of these greenhouse gases trap an increased amount of heat inside the atmosphere. *See id.* This increased heat raises the earth’s surface temperature. *See id.*

2. *See* COMM. ON THE SCIENCE OF CLIMATE CHANGE, NAT’L RESEARCH COUNCIL, CLIMATE CHANGE SCIENCE: AN ANALYSIS OF SOME KEY QUESTIONS 16 (2001) available at <http://www.nap.edu/catalog/10139.html>. [hereinafter CLIMATE CHANGE]. The National Resource Council conducted a study on climate change in 2001 at the White House’s behest. *See id.* at vii. The Council estimated that the earth’s surface temperature has risen between 0.7° and 1.5° Fahrenheit in the last century. *See id.* at 16. It attributed this increase to augmented levels of atmospheric CO₂ produced by human activities. *See id.* at 1.

3. *See* Zachary Coile, *Top Court Gets Case on Global Warming: California’s Key Law on Auto Emissions at Stake in Ruling*, S.F. CHRON., June 27, 2006, at A1.

4. *See* Jeffrey Kluger, *The Tipping Point*, TIME, Apr. 3, 2006, at 34, 35.

5. *See, e.g.,* Richard A. Kerr, *A Worrying Trend of Less Ice, Higher Seas*, 311 SCI. 1698, 1698 (2006) (“Some of the glaciers draining the great ice sheets of Antarctica and Greenland have sped up dramatically, driving up sea level and catching scientists unawares.”); *see also* Doug Struck, *Inuit See Signs in Arctic Thaw: String of Warm Winters*

and pacific island nations have watched a rapacious ocean swallow the ground beneath their feet.⁷ More troubling, some experts believe these regional upsets could represent merely the initial signs of climate change.⁸ Due to the potentially catastrophic danger posed by global warming, many national governments have passed laws designed to reduce the amount of CO₂ emitted in their countries.⁹ The United States government, however, has not passed any such laws.¹⁰

The lack of a federal regulatory scheme to slow climate change has placed the onus of addressing this global problem on the slight shoulders of state governments. In recent years, many state governments have passed legislation targeted at harnessing CO₂ emissions, and other states have formed regional partnerships in order to limit emissions on a wider geographical scale.¹¹ While these endeavors might serve to bridge the gap between state regulation and a national regulatory scheme, they face a number of challenges that stand in the way of their success. Ultimately, the federal government must intervene to effectively combat an environmental crisis as massive as climate change.

Alarms "Sentries for the Rest of the World," WASH. POST, Mar. 22, 2006, at A1.

6. Many scientists indirectly blame global warming for the destruction Hurricanes Katrina and Rita wreaked on Louisiana, Mississippi, and Texas. *See, e.g.,* Jeffrey Kluger, *Global Warming: The Culprit?*, TIME, Oct. 3, 2005, at 42, 43 ("For years, environmentalists have warned that one of the first and most reliable signs of a climatological crash would be an upsurge in the most violent hurricanes, the kind that thrive in a suddenly warmer world.")

7. *See* Nick Squires, *Pacific Paradise Is Disappearing Beneath Waves*, DAILY TELEGRAPH (Eng.) Mar. 18, 2006, at 15 (reporting the travails of the Tuvalu islanders, who may have to abandon their country because of rising sea levels).

8. *See* Kerr, *supra* note 5, at 1701.

9. Take, for instance, the Kyoto Protocol, an international agreement which "requires signatory nations to reduce their carbon dioxide emissions to a level 7 to 10 percent below what they were at 6 years ago." Richard A. Posner, *Efficient Responses to Catastrophic Risk*, 6 CHI. J. INT'L L. 511, 516 (2006). *See generally* MICHAEL GRUBB ET AL., THE KYOTO PROTOCOL: A GUIDE AND ASSESSMENT (1999) (providing an in-depth analysis of the Kyoto Protocol). In September 2006, governmental leaders from Europe and Asia further raised the emissions bar by tentatively vowing to reduce CO₂ emissions below those mandated by the Kyoto Protocol. *See* Aoife White, *Emissions Targets Set at Helsinki Summit*, YAHOO! NEWS, Sept. 11, 2006, http://news.yahoo.com/s/ap/20060911/ap_on_re_eu/summit_climate_change.

10. *See, e.g.,* FRED BOSSELMAN ET AL., ENERGY, ECONOMICS AND THE ENVIRONMENT 1262 (2d ed. 2006) ("In the United States, federal effort has centered almost exclusively on voluntary reduction programs.")

11. For a searchable database of state programs that address global warming, see Pew Center on Global Climate Change, State and Local Net Greenhouse Gas Emissions Reduction Programs, <http://www.pewclimate.org/states.cfm> (last visited Nov. 6, 2006).

This article will critically examine the two most promising subnational attempts to combat global warming. Part II will provide a detailed description and analysis of the Regional Greenhouse Gas Initiative, a regulatory scheme created by a coalition of northeast states that imposes limits on CO₂ at the interstate level. Though the Regional Greenhouse Gas Initiative exemplifies the type of ingenuity necessary to counteract global warming, it faces inherent geographical constraints that will limit its effectiveness. Part III will focus on the benefits of and conflict surrounding California's aggressive greenhouse gas law, Assembly Bill 1493, which could potentially cut CO₂ emissions from motor vehicles by a sizeable margin. Before Assembly Bill 1493 can take effect, however, it must leapfrog two legal obstacles, both of which threaten to invalidate the bill. Despite the considerable challenges that will hamper any sort of attempt to fight a transnational problem on a subnational level, these two efforts will, if nothing else, provide the federal government with a template upon which it can design a comprehensive regulatory scheme when it is finally forced to address global warming in the future.

II. THE REGIONAL GREENHOUSE GAS INITIATIVE

A. *The Regional Greenhouse Gas Initiative's Background and Ultimate Objectives*

In April 2003, New York Governor George Pataki contacted the governors of eleven other northeastern states to gauge interest in forming a regional partnership aimed at controlling CO₂ emissions.¹² The response was overwhelmingly positive, and four months later state representatives had already formulated an action plan designed "to develop a regional cap-and-trade program covering carbon dioxide emissions from power plants."¹³ Eventually, seven states committed to participating in an emissions reduction scheme they coined the Regional Greenhouse Gas Initia-

12. Regional Greenhouse Gas Initiative, About RGGI, <http://www.rggi.org/about.htm> (last visited Nov. 6, 2006).

13. *Id.* The cap-and-trade program applies to any "fossil fuel-fired stationary boiler, combustion turbine, or combined cycle system" that "serves an electricity generator with a nameplate capacity equal to or greater than 25 [megawatts]." REGIONAL GREENHOUSE GAS INITIATIVE MODEL RULE §§ XX-1.2(bj), -1.4(a) (Reg'l Greenhouse Initiative 2006) available at http://rggi.org/docs/model_rule_8_15_06.pdf [hereinafter MODEL RULE].

tive ("RGGI").¹⁴ The RGGI's objectives are to reduce regional CO₂ emissions to 1990 levels by 2009 and to maintain that emissions level through 2014.¹⁵ By 2018, the agreement requires the participants to lower regional emissions by ten percent.¹⁶

On August 15, 2006, the RGGI organizers released a Model Rule intended to serve as a uniform set of regulations that participating state agencies could adopt in order to implement the RGGI.¹⁷ The Model Rule delineates the RGGI's cap-and-trade model, which places a hard cap on CO₂ emissions and forces polluters to procure enough emissions allowances to cover their CO₂ output.¹⁸ The Model Rule initially caps regional emissions at 121 million tons of CO₂, and the RGGI will create enough allowances to cover this level of pollution.¹⁹ Each state will receive an emissions budget—a share of allowances relative to its emissions output—and may then distribute the allowances to emitters.²⁰ If

14. See *Seven Northeast States Launch Regional Greenhouse Gas Initiative*, ENV'T NEWS SERV., Dec. 20, 2005, <http://www.ens-newswire.com/ens/dec2005/2005-12-20-05.asp>. Connecticut, Delaware, Maine, New Hampshire, New Jersey, New York, and Vermont originally comprised the RGGI's seven signatories. See *id.* Although Massachusetts and Rhode Island did not elect to participate in the RGGI, they may join the regional consortium at any future time. See *id.* More recently, Maryland became the eighth state to sign onto the RGGI. Anthony DePalma, *Pollution Pact Gets Maryland as 8th Member*, N.Y. TIMES, Apr. 7, 2006, at A22.

15. REGIONAL GREENHOUSE GAS INITIATIVE—OVERVIEW, 1 (2005) available at http://www.rggi.org/docs/mou_rggi_overview_12_20_05.pdf.

16. *Id.*

17. See *Regional Greenhouse Gas Initiative, Model Rule & Amended Memorandum of Understanding*, <http://www.rggi.org/modelrule.htm> (last visited Nov. 6, 2006). The Model Rule is the product of months of public comment review and substantive revision to the Draft Model Rule, which the signatory states originally released on March 23, 2006. See *id.* For a brief summary of the revisions, see *RGGI Group Issues Rule with Easier Offset Use*, MEGAWATT DAILY, Aug. 16, 2006, at 9, available at 2006 WLNR 15084924.

18. Press Release, Reg'l Greenhouse Gas Initiative, States Reach Agreement on Proposed Rules for the Nation's First Cap-and-Trade Program to Address Climate Change (Aug. 15, 2006), available at http://rggi.org/docs/model_rule_release_8_15_06.pdf. The RGGI provides companies with three avenues to cover their CO₂ emissions. A plant may either purchase allowances from other facilities, purchase allowances from its state government, or engage in offsets projects outside of the energy sector. Press Release, Office of Governor M. Jodi Rell, Governor Rell Says Conn. Taking Critical Steps on Energy Independence and Environmental Protection (Dec. 20, 2005), available at <http://www.ct.gov/governorrell/cwp/view.asp?Q=307886&A=1761>.

19. REG'L GREENHOUSE GAS INITIATIVE, MEMORANDUM OF UNDERSTANDING 2 (2005), available at http://rggi.org/docs/mou_12_20_05.pdf.

20. *Id.* at 2–3. Note, however, that each state has agreed to dedicate twenty-five percent of its allocated allowances to “consumer benefit or strategic energy purpose[s].” *Id.* at 6. Such purposes include, among other things, promoting “energy efficiency” and mitigating “electricity ratepayer impacts” caused by the CO₂ cap. *Id.* Each state will presumably sell the withheld allowances in order to fund these public energy initiatives. See *Final*

companies have excess allowances, they may sell them to power plants that do not have enough credits to cover their emissions.²¹ The RGGI gives energy producers an economic incentive to develop CO₂ reduction technology; the less CO₂ a facility emits, the less allowances it must obtain.²²

B. *The RGGI Under the Microscope: Advantages and Shortcomings*

1. The Flexibility of Offset Projects Lowers Compliance Costs for Emitters

One of the RGGI's main advantages lies in the flexibility it provides polluters to meet their allowance requirements. Unlike the Clean Air Act's ("CAA") pioneering cap-and-trade program to reduce sulfur dioxide ("SO₂") emissions,²³ the RGGI allows electric power plants to acquire allowances in a variety of ways. The CAA's sulfur dioxide cap-and-trade program is a rigid regulatory scheme; polluters must buy enough market allowances to cover their sulfur dioxide emissions. Though SO₂ polluters can reduce emissions from their plants in a variety of ways, they are limited to intra-plant mechanisms of emissions reduction.²⁴ No such limitation exists in the RGGI's cap-and-trade approach because polluters have a multitude of extra-plant methods at their disposal by which they can reduce CO₂ emissions.

Facilities, via "offset projects," can choose the most cost-effective manner to meet their allowance requirement.²⁵ For instance, the Model Rule rewards plants with allowances if they encourage end-use energy efficiency, capture and dispose of meth-

RGGI Model Rule Sets Stage for Battles over Emissions Credits, CLEAN AIR REP., Aug. 24, 2006, available at 2006 WLNR 14597052.

21. REGIONAL GREENHOUSE GAS INITIATIVE, *supra* note 15.

22. See Anthony DePalma, *Fears of Energy Price Increase Delay 9-State Pollution Pact*, N.Y. TIMES, Nov. 29, 2005, at B4.

23. Clean Air Act §§ 401–416, 42 U.S.C. §§ 7651–7651o (2000) (delineating a national cap-and-trade program to reduce sulfur dioxide emissions).

24. Byron Swift, *How Environmental Laws Work: An Analysis of the Utility Sector's Response to Regulation of Nitrogen Oxides and Sulfur Dioxide Under the Clean Air Act*, 14 TUL. ENVTL. L.J. 309, 322 (2001) ("[A] utility is free to choose among competing compliance approaches, including scrubbing, switching to lower sulfur coal, blending coals with different sulfur contents, and shifting load to units that emit less sulfur."). Notice, however, that a facility's contribution to emissions reductions derives solely from limiting its *own* plant's emissions. See *id.*

25. *Seven Northeast States Launch Greenhouse Gas Initiative*, *supra* note 14.

ane released from landfills, or reforest property.²⁶ If a company finds it inefficient to simply purchase market allowances, it can engage in one or many of these offset projects in order to gain additional allowances. Moreover, the Model Rule does not geographically confine power generators who would like to pursue such projects outside of the signatory states.²⁷ Emitters may engage in offset projects anywhere in the United States.²⁸ The wide variety of projects, in addition to the lack of national geographical constraints, “gives businesses [increased] flexibility to meet emission reduction goals at the lowest costs.”²⁹

Though these offsets may not constitute greater than 3.3% of a facility’s reported emissions,³⁰ the percentage of allowances a company can acquire through offset projects increases if tradable allowances reach a threshold price. If the price per allowance exceeds seven dollars for a twelve-month span, offset allowances may comprise up to five percent of generators’ CO₂ emissions.³¹ If the price per allowance rises to over ten dollars for a twelve-month span, electricity producers will have an additional year to meet their compliance obligations,³² may utilize offsets for up to ten percent of their emissions,³³ and may use offsets from an international trading program.³⁴

26. MODEL RULE, *supra* note 13, § XX-10.3(a)(1). See generally Margaret A. Yowell & Jessica K. Ferrell, *Using Carbon Sequestration Projects to Offset Greenhouse Gas Emissions*, 20 NAT. RESOURCES & ENV’T 20 (2005) (exploring the viability of reducing CO₂ emissions via various means of carbon sequestration).

27. MODEL RULE, *supra* note 13, § XX-10.3(a)(2).

28. *Id.* If an emitter chooses to oversee an offset project in a non-signatory state, a regulatory agency of that state must enter into a memorandum of understanding with the state in which the emitter operates, agreeing, among other things, to “perform audits of offset project sites, and report violations” of certain Model Rule provisions. *Id.* § XX-10.3(a)(2)(ii). The Draft Model Rule originally stated that “one CO₂ offset allowance w[ould] be awarded for two tons of demonstrated reductions in CO₂ emissions . . . from a CO₂ emissions offset project that was undertaken within any [s]tate that is not a [p]articipating [s]tate.” PUBLIC REVIEW MODEL RULE DRAFT 03/23/06, § XX-10.7(a)(1)(i)(b) (Reg’l Greenhouse Gas Initiative 2006), available at http://www.rggi.org/docs/public_review_draft_mr.pdf. The revised Model Rule no longer discounts offset projects outside of the signatory states. MODEL RULE, *supra* note 13, § XX-10.3(a)(2)(ii).

29. The Nature Conservancy, Northeastern Regional Greenhouse Gas Initiative (RGGI), <http://www.nature.org/initiatives/climatechange/strategies/art16919.html> (last visited Nov. 6, 2006).

30. MODEL RULE, *supra* note 13, § XX-6.5(a)(3)(i).

31. *Id.* § XX-6.5(a)(3)(ii).

32. *Id.* § XX-6.5(a)(3)(iii).

33. *Id.* § XX-10.3(b)(2).

34. *Id.* § XX-1.2(a).

The member states recognized the global ubiquity of CO₂,³⁵ and thereby allowed emitters the flexibility to pursue offset projects anywhere in the nation. This geographical freedom will help stabilize the price of emissions allowances. As available allowances decrease and demand increases, power generators may scour the globe for offset program opportunities. Aside from the environmental benefits of international offset programs, allowing offset allowances to cover a larger portion of emissions will presumably stabilize the price of non-offset market allowances.³⁶ Stabilization of these allowances safeguards electricity generators' profit margins in a CO₂-regulated environment. Safeguarding electricity producers' profit margins will, in turn, ensure that consumers do not bear the brunt of CO₂ emissions compliance in the event that non-offset market allowances become scarce.³⁷ Indeed, the RGGI organizers estimate that the cap-and-trade system will raise "residential [electricity] bills by \$3 to \$21 annually"—a seemingly negligible price increase.³⁸

2. The RGGI as a Model for Other Regional Efforts

Unfortunately, the RGGI's actual reduction of global CO₂ emissions will probably be negligible at best. With the exception of New York and New Jersey, which respectively rank ninth and

35. See R.T. Pierrehumbert, *Climate Change: A Catastrophe in Slow Motion*, 6 CHI. J. INT'L L. 573, 580 (2006) ("The atmosphere truly is a global commons with respect to carbon dioxide, making emissions trading schemes far more benign than would be the case for pollutants, such a mercury, which have locally lethal impacts.").

36. If the price of sulfur dioxide allowances under the federal cap-and-trade program is any indicator of CO₂ allowance prices under the RGGI's scheme, CO₂ prices should remain relatively stable: "As of the end of 2002, . . . reduction of [sulfur dioxide] was ahead of schedule—down 41% from 1980—with the market price for emission allowances *significantly lower* than the dire predictions made by industry critics prior to the program's implementation." Grinning Planet, *Why Mercury Was Not the God of "Cap and Trade"* (2004), <http://www.grinningplanet.com/2004/02-12/cap-and-trade-pollution-credits-eco.htm> (emphasis added).

37. See Press Release, Office of Governor M. Jodi Rell, *supra* note 18 ("The agreement is expected to have a minimal impact on the price of energy for consumers. It . . . contain[s] provisions to control the price of 'allowances' if there are unanticipated impacts on energy costs.").

38. *RGGI Group Issues Rule with Easier Offset Use*, *supra* note 17; see also Conservation Law Foundation, *Regional Greenhouse Gas Initiative*, <http://www.clf.org/programs/cases.asp?id=341> (last visited Nov. 6, 2006) (citing MARC BRESLOW & EBAN GOODSTEIN, *IMPACT OF THE REGIONAL GREENHOUSE GAS INITIATIVE (RGGI) ON OVERALL BUSINESS OPERATING COSTS IN RHODE ISLAND 3* (2005), <http://www.clf.org/programs/cases.asp?id=341> (follow "recent study" hyperlink) (noting that the RGGI would result in saving a typical residential customer \$100 in electricity costs annually)).

seventeenth among the states in greenhouse gas emissions, the six other states in the RGGI all rank in the forties.³⁹ Because the northeast states produce relatively little CO₂, the CO₂ reductions realized through the RGGI will not markedly decrease CO₂'s atmospheric content. The real value of the RGGI, however, lies not in its contribution to global CO₂ reductions, but in the prototype it provides for other regional trading programs.⁴⁰

Other states have already begun to form regional regulatory alliances which could potentially mirror the RGGI's structure. Take, for instance, the West Coast Governors' Global Warming Initiative ("WCGGWI"), an alliance which consists of California, Oregon, and Washington.⁴¹ Among the objectives of the WCGGWI is the development of "a market-based carbon allowance program."⁴² In the WCGGWI staff's report to the Governors, it recommended that "the West Coast states should become formal observers to the Regional Greenhouse Gas Initiative."⁴³ The staff recognized the tremendous advantages of observation, in that the WCGGWI "could benefit greatly from tracking the progress of the Northeast states' exploration of the policy and economic issues that arise when designing a regional carbon market."⁴⁴ Unlike

39. See BARRY G. RABE, *STATEHOUSE AND GREENHOUSE: THE EMERGING POLITICS OF AMERICAN CLIMATE CHANGE POLICY 2* (2004). "Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont produce approximately 3 percent of total U.S. emissions." *Id.* at 138.

40. See REGIONAL GREENHOUSE GAS INITIATIVE (RGGI): GOALS, PROPOSED TASKS, AND SHORT-TERM ACTION ITEMS 1 (2003), <http://rggi.org/docs/actionplanfinal.pdf> (noting that the RGGI may "serve as a platform or model" for future emissions programs in other states). The governors of the participating states also consider the RGGI a model on which the federal government could eventually base a national trading scheme. See, e.g., Press Release, NT Office of the Governor, Codey Announces Landmark Regional Agreement to Combat Global Warming (Dec. 20, 2005), available at http://www.state.nj.us/cgi-bin/governor/njnewsline/view_article.pl?id=2851 ("Ultimately, the success of this model will lead the way to a national program to cut greenhouse gas pollution and reduce the threat of global climate change."); see also Press Release, Governor Ruth Ann Minner, Governor Minner and Six Other Governors Announce Agreement on Regional Greenhouse Gas Initiative (Dec. 20, 2005), available at <http://www.state.de.us/governor/news/2005/12december/122005rggi.shtml> ("I also see the potential for this program serving as a national model.").

41. West Coast Governors' Global Warming Initiative, <http://www.ef.org/westcoastclimate> (last visited Nov. 6, 2006).

42. *Id.*

43. WEST COAST GOVERNORS' GLOBAL WARMING INITIATIVE STAFF RECOMMENDATIONS TO THE GOVERNORS 14 (2004), available at http://www.climatechange.ca.gov/westcoast/documents/2004-11_final_report/2004-11-18_STAFF_RECOMMENDS.PDF.

44. *Id.*; see Laura H. Kosloff et al., *Outcome-Oriented Leadership: How State and Local Climate Change Strategies Can Most Effectively Contribute to Global Warming Mitigation*, 14 WIDENER L.J. 173, 181 (2004) ("Subsequent governments can learn from policies

the RGGI, where most of the member states do not significantly contribute to global CO₂ emissions, the three states that make up the WCGGWI rank seventh in the world in aggregated CO₂ output.⁴⁵ With the guidance that the RGGI will surely provide, partnerships such as these could form a viable patchwork of interstate initiatives to control CO₂ emissions.

3. Limitations that the RGGI Cannot Surmount

Though the RGGI presents many exciting advantages, it still falls short of a federal CO₂ regulatory program because of individual states' susceptibility to pressure from industrial opponents of regulation. In late 2005, shortly before the northeast states were to sign the formal RGGI agreement, Massachusetts and Rhode Island pulled out of the RGGI, caving "to pressure from large corporations that own dirty coal-fired power plants and see the program as a threat to their profits."⁴⁶ Massachusetts Governor Mitt Romney insisted that the RGGI include price ceilings for energy producers, in order to ensure that power plants would not have to pay excessive amounts to cover their CO₂ emissions.⁴⁷ The signatory states, however, refused to accede to Romney's demand.⁴⁸ The RGGI organizers regarded price caps as an industry-friendly safeguard that would obfuscate the RGGI's purpose—to force emitters to develop technology capable of reducing CO₂ output.⁴⁹ Massachusetts and Rhode Island's behavior exemplifies the type of inconsistency that will hinder the effectiveness of the RGGI.

and measures applied elsewhere and will have a better understanding of the social, political, environmental, and economic outcomes. Therefore, the role of states is often one of leadership; by implementing and evaluating policies they can reduce the learning curve for other states or the federal government to adopt similar policies.”).

45. WEST COAST GOVERNORS' GLOBAL WARMING INITIATIVE STAFF RECOMMENDATIONS TO THE GOVERNORS, *supra* note 43, at 4.

46. Conservation Law Foundation, *supra* note 38; see also Chelsea Conaboy, *Concerns Raised About Regional Emissions Plan*, CONCORD MONITOR, Dec. 1, 2005 (reporting Massachusetts's Governor Mitt Romney's hesitation to sign the agreement due to the strain it could place on electricity generators).

47. See DePalma, *supra* note 22; see also Barry G. Rabe et al., *State Competition as a Source Driving Climate Change Mitigation*, 14 N.Y.U. ENVTL. L.J. 1, 32 (2005) (“Traditionally, climate change mitigation policies have been seen as a limitation on industry, mainly because mitigatory regulations impose extra costs on individual firms for technological upgrades.”).

48. DePalma, *supra* note 22.

49. *Id.* New York and New Jersey argued that caps “are not needed to protect customers and can dampen incentives to develop cleaner alternatives.” *Id.*

III. CALIFORNIA'S CO₂ EMISSIONS LEGISLATION

A. *Assembly Bill 1493: Taking a Hard Line on Tailpipe Emissions*

Until 2002, the overwhelming majority of state global warming legislation addressed CO₂ emissions from stationary sources. Many of these laws took shape over a number of years; the RGGI, for instance, evolved from a series of regional discussions and even included a "stakeholder process" whereby soon-to-be-regulated businesses and environmental organizations could give state representatives substantive feedback about the cap-and-trade program.⁵⁰ Efforts such as the RGGI "involved a relatively quiet process of policy development and consensus building, nurtured by state agency officials."⁵¹ On July 22, 2002, however, former California Governor Gray Davis turned up the volume on global warming legislation when he signed Assembly Bill ("AB") 1493 into law.⁵²

The California government had decided it could only stomach federal inaction but for so long, and AB 1493 signified a crack-down on the transportation industry's munificent contribution to CO₂ emissions.⁵³ The law charged the California Air Resources Board ("CARB") with developing "regulations that achieve the maximum feasible and cost-effective reduction of greenhouse gas emissions from motor vehicles."⁵⁴ CARB's regulations, written in

50. See Regional Greenhouse Gas Initiative, Stakeholder Process, <http://rggi.org/stakeholder.htm> (last visited Nov. 6, 2006). The initial stakeholders ranged from electricity behemoths such as Dominion and Entergy to left wing environmental organizations such as Environmental Defense. See Regional Greenhouse Gas Initiative Stakeholder Process: Stakeholder Member Organizations and Lead Representatives, http://rggi.org/stakeholder_member.htm (last visited Nov. 6, 2006).

51. RABE, *supra* note 39, at 143.

52. *Id.* at 141-42.

53. *Id.* at 142-43. ("[T]he California [law] reflects a more traditional and adversarial style of environmental policymaking. It represents a familiar divide between environmental groups and auto manufacturers 'in a clash reminiscent of their first collisions more than three decades ago.'" (quoting Carl Ingram, *Senate Votes to Require Cleaner-Running Cars, Light Trucks*, L.A. TIMES, May 3, 2002, at B8)). Scientists estimate that transportation sources account for one-third of CO₂ emissions in the United States. See Union of Concerned Scientists, California Regulates Global Warming Emissions from Motor Vehicles, http://www.ucsusa.org/clean_vehicles/vehicles_health/californias-global-warming-vehicle-law.html (last visited Nov. 6, 2006). In California, 41% of CO₂ emissions come from the transportation sector. See *id.*

54. CAL. HEALTH & SAFETY CODE § 43018.5(a) (West 2006).

2004⁵⁵ and scheduled to take effect on January 1, 2006, “set near-term emission standards, phased in from 2009 through 2012, and mid-term emission standards, phased in from 2013 through 2016.”⁵⁶ If implemented, the rules would eventually cut greenhouse gas emissions from automobiles by thirty percent.⁵⁷ Before CARB’s regulations may take effect, however, California has a legal hoop through which it must jump and a court battle which it must win. California must secure a regulatory waiver from the federal Environmental Protection Agency (“EPA”) and prevail in a lawsuit against several automobile dealers and manufacturers who have challenged the regulations’ validity.⁵⁸

B. *Crossing the First Bridge: California’s Waiver Request*

California’s stature as a figurehead of progressive environmental legislation derives from its ability to independently regulate motor vehicle emissions, notwithstanding federal regulation. When Congress passed the CAA in 1970, it prohibited states from “adopt[ing] or attempt[ing] to enforce any standard relating to the control of emissions from . . . new motor vehicle engines.”⁵⁹ Congress granted itself plenary power to create motor vehicle emissions standards, with one exception. It waived the application of this prohibitory provision for “any State which ha[d] adopted standards . . . for the control of emissions from new motor vehicles or new motor vehicle engines prior to March 30, 1966.”⁶⁰ Only California qualified under the CAA’s section 209(b) waiver provi-

55. See Union of Concerned Scientists, *supra* note 53.

56. CAL. ENVTL. PROT. AGENCY AIR RES. BD., REQUEST FOR A CLEAN AIR ACT SECTION 209(B) WAIVER OF PREEMPTION FOR CALIFORNIA’S ADOPTED AND AMENDED NEW MOTOR VEHICLE REGULATIONS AND INCORPORATED TEST PROCEDURES TO CONTROL GREENHOUSE GAS EMISSIONS: SUPPORT DOCUMENT 6 (2005), available at http://www.arb.ca.gov/cc/docs/att2_support.pdf [hereinafter SUPPORT DOCUMENT].

57. See Sholnn Freeman, *States Adopt California’s Greenhouse Gas Limits*, WASH. POST, Jan. 3, 2006, at D1.

58. See Danny Hakim, *Automakers Sue to Block Emissions Law in California*, N.Y. TIMES, Dec. 8, 2004, at C1. The plaintiffs in the lawsuit, styled *Central Valley Chrysler-Jeep, Inc. v. Witherspoon*, consist of various California automobile dealerships, General Motors Corporation, DaimlerChrysler Corporation, the Tulare County Farm Bureau, and the Alliance of Automobile Manufacturers. No. CV-F-04-6663, 2005 WL 2709508, at *1 (E.D. Cal. Oct. 20, 2005) (order denying defendant’s motion to dismiss and certifying venue for immediate appeal).

59. Clean Air Act § 209d(a), 42 U.S.C. § 7543(a) (2000).

60. *Id.* § 209(b)(1), 42 U.S.C. § 7543(b)(1).

sion because it had regulated automobile emissions since the early 1960s.⁶¹

Over the years, California has utilized its excepted status to enact innovative laws aimed at environmental protection. It has passed revolutionary legislation “regarding the use of unleaded gasoline, catalytic converters, and clean diesel fuel.”⁶² In each of these cases, California’s laws laid the foundation for subsequent federal action “to establish a more uniform standard for the nation.”⁶³ Moreover, the fact that any other state may adopt California’s emissions standards as long as “such standards are identical to the California standards for which a waiver has been granted” places California in an extremely powerful legislative position.⁶⁴

Even in the absence of federal regulation, there exists a realistic possibility for AB 1493 to significantly reduce CO₂ emissions. Ten other states—Connecticut, Maine, Massachusetts, New Jersey, New York, Pennsylvania, Vermont, Oregon, Rhode Island, and Washington—have already passed or will soon adopt their own version of AB 1493.⁶⁵ The combined number of vehicles in these states amounts to roughly “a third of the national passenger vehicle market.”⁶⁶ If more states follow California’s lead, AB 1493 has the potential to make a marked impact in slashing global CO₂ emissions. On the other hand, if the EPA denies California’s waiver, ten other states fail along with California.

1. Fighting an Uphill Battle

As long as California’s legislation is at least as stringent as the federal standard, the EPA may only deny a California waiver request for one of three reasons: (1) if California’s “determination . . . is arbitrary and capricious;” (2) if California “does not need

61. See RABE, *supra* note 39, at 142.

62. *Id.* For a brief chronology of landmark California air pollution laws, see NOW Air Wars: California’s Auto Emissions Laws, Apr. 15, 2005, <http://www.pbs.org/now/index.html> (search “Air Wars,” then follow hyperlink).

63. See RABE, *supra* note 39, at 142.

64. Clean Air Act § 177, 42 U.S.C. § 7507.

65. See Environment: Three More States To Adopt California Emissions Law (Dec. 23, 2005), http://www.channel4.com/4car/news/news-story.jsp?news_id=13634&ref=archive.

66. Union of Concerned Scientists, Automakers v. the People: Engineers, not Lawyers, Should be the Solution to Global Warming Pollution, http://www.ucsusa.org/clean_vehicles/avp (last visited Nov. 6, 2006).

such . . . standards to meet compelling and extraordinary conditions;” or, (3) if California’s “standards and accompanying enforcement procedures are not consistent with”⁶⁷ the EPA’s authority to regulate “emission[s] of any air pollutant.”⁶⁸ Though the EPA has granted more than forty of California’s waiver requests over the past three decades,⁶⁹ a recent administrative decision by the EPA indicates that it may issue a rare denial.

In 2003, the EPA denied a group of petitioners’ request for the EPA to promulgate national standards to reduce CO₂ emissions from motor vehicles.⁷⁰ The petitioners claimed that section 202(a)(1) of the CAA compelled the EPA to regulate CO₂ emissions from automobiles,⁷¹ because CO₂ was “caus[ing], or contribut[ing] to, air pollution which may reasonably be anticipated to endanger public health or welfare.”⁷² In denying the petitioners’ request, the EPA concluded that it lacked authority under the CAA to regulate CO₂ emissions from mobile sources.⁷³ The EPA found that, in light of “consistent congressional action to learn more about the global climate change issue before specifically authorizing regulation to address it, the CAA cannot be interpreted to authorize such regulation.”⁷⁴ The EPA could very easily extend this rationale to California’s waiver request by arguing that if the CAA does not authorize the EPA to regulate CO₂, then it preempts California from regulating it as well.⁷⁵ Moreover, the

67. Clean Air Act § 209(b)(1)(A)–(C), 42 U.S.C. § 7543(b)(1)(A)–(C).

68. *Id.* § 202(a)(1), 42 U.S.C. § 7521(a)(1).

69. Letter from Twenty-One Senators to The Honorable Stephen L. Johnson, Administrator, Environmental Protection Agency (Mar. 30, 2006), available at <http://feinstein.senate.gov/06releases/pavley-ltr.pdf>.

70. Control of Emissions From New Highway Vehicles and Engines, 68 Fed. Reg. 52,922, (Env’t Prot. Agency Sept. 8, 2003).

71. *Id.* at 52,923.

72. Clean Air Act § 202(a)(1), 42 U.S.C. § 7521(a)(1).

73. See Control of Emissions From New Highway Vehicles and Engines, 68 Fed. Reg. at 52,928.

74. *Id.* The petitioners appealed the EPA’s determination to the United States Court of Appeals for the District of Columbia, which upheld the EPA’s decision. See *Massachusetts v. EPA*, 415 F.3d 50, 58–59 (D.C. Cir. 2005). The petitioners further appealed to the Supreme Court, which granted certiorari on June 26, 2006. *Massachusetts*, 415 F.3d 50, cert. granted, 126 S. Ct. 2960 (June 26, 2006) (No. 05-1120.) The Court will issue an opinion during the 2006–2007 term.

75. See Ann E. Carlson, *Federalism, Preemption, and Greenhouse Gas Emissions*, 37 U.C. DAVIS L. REV. 281, 295 (2003) (“Because the federal government does not, and under the Bush Administration’s analysis cannot, regulate greenhouse gas emissions . . . , the argument would conclude that California cannot regulate such emissions . . . , and therefore that the California regulations are subject to the broad CAA preemption provision.”).

EPA's reasoning aligns with the third statutory criteria for a denial—that California's enforcement procedures conflict with the EPA's authority to regulate air pollutants.⁷⁶

The EPA might buttress its denial on the second statutory criteria—that global warming's potential effects on California's environment and population do not rise to the level of “compelling and extraordinary conditions” that section 209(b) appears to demand.⁷⁷ Under this line of reasoning, the “rising sea levels, decreased snowpack and spring runoff, and more severe weather and wildfires”⁷⁸ that California could experience are no different than problems that other states might have to confront in a hotter climate.

Nevertheless, California has a variety of counterarguments at its disposal to refute a waiver denial. One such argument is simply to carry the EPA's “no authority to regulate” contention to its logical conclusion. Although the CAA prohibits states from regulating CO₂ “emissions” . . . without qualification,⁷⁹ California could plausibly argue that if the EPA does not consider CO₂ an air pollutant, then a motor vehicle's CO₂ output does not qualify as an “emission”⁸⁰ under the CAA.⁸¹ If this argument suffices, California need not apply for a waiver at all.

With respect to the second statutory criteria, California contended in its waiver application that section 209(b) does not require it to demonstrate that AB 1493 is necessary to combat “unique threats from greenhouse gas emissions.”⁸² California asserted, rather, that “[t]he relevant inquiry . . . is whether Califor-

76. See Clean Air Act § 209(b)(1)(C), 42 U.S.C. § 7543(b)(1)(C).

77. See *id.* § 209(b)(1)(B), 42 U.S.C. § 7543(b)(1)(B); Carlson, *supra* note 75, at 297 (“[T]he EPA may counter that the hardships California could experience as a result of rising temperatures are not so different from those faced by other states.”).

78. Memorandum of Points and Authorities in Support of Defendant's Motion to Dismiss Plaintiffs' First Amended Complaint at 1, Central Valley Chrysler-Jeep, Inc. v. Witherspoon, No. CIV F-04-6663 (E.D. Cal. Mar. 7, 2005), available at http://www.calcleancars.org/legal/ARB_pts_%20author_mtb030705.pdf. In a report prepared for the President, the National Research Council predicted that climate change would result in “decreased snow pack and/or earlier season melting.” CLIMATE CHANGE, *supra* note 2, at 19. The Council noted that the “western part of the nation,” not only California, “is highly dependent on the amount of snow pack and the timing of the runoff.” *Id.* at 19–20. The Council's findings militate in favor of an EPA denial grounded on the second criteria.

79. Carlson, *supra* note 75, at 296.

80. See Clean Air Act § 209(a), 42 U.S.C. § 7543(a).

81. See Carlson, *supra* note 75, at 295–96.

82. SUPPORT DOCUMENT, *supra* note 56, at 16.

nia needs its own emission control program to meet compelling and extraordinary conditions, not whether any given standard is necessary to meet such conditions.”⁸³ Thus, in California’s view, as long as its “unique geographical and climatic conditions” justify its excepted status under the EPA, it meets the second statutory criteria enumerated in section 209(b).⁸⁴

Notwithstanding the validity of California’s assertions, the EPA will probably turn a deaf ear to California’s arguments because its 2003 denial intimates that it opposes any sort of regulatory regime for CO₂ emissions.⁸⁵ California could, however, seek review by the United States Court of Appeals for the District of Columbia if the EPA denies its waiver.⁸⁶

C. *Crossing the Second Bridge*: Central Valley Chrysler-Jeep, Inc. v. Witherspoon⁸⁷

In addition to procuring its waiver request, California must prevail in a federal lawsuit filed by automobile dealers and manufacturers who vehemently oppose tailpipe CO₂ emissions regulation.⁸⁸ The plaintiffs filed suit in the United States District Court for the Eastern District of California on December 7, 2004, seeking to block CARB’s regulations from taking effect.⁸⁹ The plaintiffs offered a slew of reasons why the regulations were invalid. They alleged, among other things, that the regulations “are preempted by the fuel economy standards set under the Energy Policy and Conservation Act, which instructs that states not enforce any rule related to fuel economy standards [and that they] are preempted by the CAA, absent a waiver approved by [the] EPA.”⁹⁰ These preemption claims are especially dangerous for

83. *Id.* at 15.

84. *Id.* at 16; see Clean Air Act § 209(b)(1)(B), 42 U.S.C. § 7543(b)(1)(B).

85. See Control of Emissions From New Highway Vehicles and Engines, 68 Fed. Reg. 52, 922 (Env’tl Prot. Agency Sept. 8, 2003).

86. See Clean Air Act § 307(b)(1), 42 U.S.C. § 7607(b)(1).

87. No. CV-F-04-6663, 2005 WL 3470653 (E.D. Cal. Dec. 19, 2005). The trial, scheduled to last approximately twenty days, is currently docketed for January 16, 2007. Scheduling Conference Order at 15, Central Valley Chrysler-Jeep, Inc. v. Witherspoon, No. CV-F-04-6663 (E.D. Cal. Sept. 19, 2005), available at http://www.calcleancars.org/legal/Scheduling_Conference_Order_9-20-05.pdf.

88. See Hakim, *supra* note 58.

89. Central Valley Chrysler-Jeep, Inc. v. Witherspoon, No. CV-F-04-6663, 2005 WL 2709508, at *1 (E.D. Cal. filed Dec. 7, 2004); see Hakim, *supra* note 58.

90. ROBERT MELTZ, CRS REPORT FOR CONGRESS, GLOBAL WARMING: THE LITIGATION

California, because they cut to the heart of California's status as an independent emissions regulator under the CAA.⁹¹

1. First Claim: Federal Law Preempts Any Attempt by California to Control Fuel Economy

The plaintiffs' first claim alleges that increasing the fuel economy of motor vehicles represents the only realistic method by which auto manufacturers could slash CO₂ tailpipe emissions.⁹² Because, however, the Energy Policy and Conservation Act ("EPCA") explicitly prohibits states from enforcing laws "related to" fuel economy standards,⁹³ the plaintiffs claim that this piece of federal legislation impliedly preempts California from enacting state legislation aimed at CO₂ emissions reduction.⁹⁴ The federal government, through the National Highway Traffic Safety Administration ("NHTSA"), weighed in on the debate, and, not surprisingly, sided with the plaintiffs.⁹⁵ The NHTSA, the agency charged with setting the national Corporate Average Fuel Economy ("CAFE") standards,⁹⁶ essentially echoed the plaintiffs' argument that the only effective way to decrease CO₂ tailpipe emissions is by making automobiles increasingly fuel efficient.⁹⁷ The NHTSA concluded that "because there is but one pool of technologies for reducing tailpipe CO₂ emissions and increasing fuel econ-

HEATS UP 10 (2006), available at <http://ncseonline.org/NLE/CRSreports/06AprRL/32764.pdf> (footnotes omitted). For a downloadable version of the plaintiffs' first amended complaint, see California Clean Cars Campaign, Legal Challenges: Court Documents & Background, http://www.calcleancars.org/legal/court_docs.html (last visited Nov. 6, 2006).

91. See generally Carlson, *supra* note 75 (predicting and analyzing the preemption arguments likely to arise in *Witherspoon*).

92. First Amended Complaint for Declaratory and Injunctive Relief at 12, *Central Valley Chrysler-Jeep, Inc. v. Witherspoon*, No. 1:04-CV-6663 (E.D. Cal. Feb. 16, 2005), available at <http://www.calcleancars.org/legal/court-docs.html> (follow "Amended Complaint Part 1" and "Amended Complaint Part 2" hyperlinks).

93. See 49 U.S.C. § 32919(a) ("When an average fuel economy standard prescribed under this chapter is in effect, a State or a political subdivision of a State may not adopt or enforce a law or regulation related to fuel economy standards or average fuel economy standards for automobiles covered by an average fuel economy standard.").

94. See First Amended Complaint, *supra* note 92, at 12.

95. See *CAFE Rule Suggests EPA Likely to Deny California Greenhouse Waiver*, CLEAN AIR REP., Apr. 6, 2006, available at 2006 WLNR 5705082.

96. See 49 U.S.C. § 32902(a).

97. See Average Fuel Economy Standard for Light Trucks Model Years 2008–2011, 71 Fed. Reg. 17,566, 17,654 (Dept' of Transp. Apr. 6, 2006) (to be codified at 49 C.F.R. pts. 523, 533, 537).

omy available now and for the foreseeable future, regulation of CO₂ emissions and fuel consumption are inextricably linked.”⁹⁸

Environmental organizations countered the plaintiffs’ argument by noting that California gained its special status under the CAA before Congress passed the EPCA.⁹⁹ These groups therefore contended that the EPCA “explicitly requires [the] NHTSA take California’s auto emission standards into account when setting CAFE standards.”¹⁰⁰ In essence, supporters of California’s law maintain that statutory incongruity does not require AB 1493’s invalidation. The plaintiffs’ first count represents the most significant hurdle for California, as the statutory language of the EPCA explicitly empowers the NHTSA with deciding the “*maximum* feasible average fuel economy” for motor vehicles.¹⁰¹

2. Second Claim: The CAA Preempts California from Regulating CO₂ Tailpipe Emissions

In light of the NHTSA’s view that the EPCA preempts California from enacting de facto emissions standards, as well as the EPA’s conclusion that it lacks authority to regulate CO₂ generated from mobile sources, the district court might very well hold that the CAA preempts California’s ability to regulate CO₂ emissions from automobiles. The plaintiffs’ argument parallels that which the EPA utilized in its 2003 Notice of Denial—when Congress created the CAA, it did not intend for the EPA to regulate CO₂.¹⁰² Thus, if the EPA does not have the authority to regulate CO₂ emissions from motor vehicles,¹⁰³ this jurisdictional void “precludes California from adopting any new motor vehicle emission standards for carbon dioxide or greenhouse gases.”¹⁰⁴ California can employ similar arguments to those it asserted in its waiver request, but the district court might be hesitant to issue a ruling that clashes with the EPA’s stance on CO₂ emissions.

98. *Id.*

99. AUTO INDUSTRY CLAIMS IN LAWSUIT SEEKING TO OVERTURN CALIFORNIA’S HISTORIC GLOBAL WARMING REGULATION 1, http://www.calcleancars.org/legal/auto_claims.pdf (last visited Nov. 6, 2006).

100. *Id.*

101. 49 U.S.C. § 32902(f) (emphasis added).

102. First Amended Complaint, *supra* note 92, at 41–42.

103. *See supra* text accompanying notes 70–76.

104. First Amended Complaint, *supra* note 92, at 41.

D. *If California Prevails, What Will AB 1493 Accomplish?*

If they take effect, the rules promulgated by CARB will force auto manufacturers to develop advanced technology in order to limit fleet tailpipe emissions. But with technological advancements such as hydrogen-powered vehicles and hybrid cars steadily developing, the question arises whether AB 1493's aggressiveness is necessary. Such technology includes fuel cell vehicles, which combine hydrogen with oxygen to create the electricity that would power the automobile.¹⁰⁵ Though hydrogen cars might be part of a long-term solution to global warming,¹⁰⁶ the technology and the infrastructure needed for the materialization of a viable hydrogen vehicle market lies decades away.¹⁰⁷ Likewise, in the policy arena, many states currently offer tax and transportation incentives for hybrid owners to encourage the sale and use of hybrid vehicles.¹⁰⁸ Although states' efforts are well intentioned, hybrid cars do not appear to be a short-term solution either. One estimate predicts that hybrid cars will constitute a mere 4.1% of the national automobile market six years from now.¹⁰⁹ These tech-

105. See Matthew Peak, *Improper Incentives: Modifying the California Zero Emission Vehicle Mandate with Regards to Regulatory, Technological, and Market Forces: 1990–2001*, 7 GEO. PUB. POL'Y REV. 137, 142 (2002) (describing the mechanics of a hydrogen vehicle).

106. See, e.g., Department of Energy, Energy Sources: Hydrogen, <http://www.energy.gov/energysources/hydrogen.htm> (last visited Nov. 6, 2006) ("Hydrogen in the long-term will simultaneously reduce dependence on foreign oil and emissions of greenhouse gases and criteria pollutants.").

107. A representative from the California Fuel Cell Partnership opined that the United States is "still a good 25–50 years away from seeing significant saturation of a hydrogen-refueling infrastructure." Peak, *supra* note 105, at 149. In California, Governor Schwarzenegger has promised to invest \$100 million to create a "hydrogen highway." See Rabe, *supra* note 47, at 38 (citing Carla Marinucci, *Recall Spotlight on Appeals Court; HECKLED: Actor Tries to Court Environmentalists Amid Protest*, S.F. CHRON., Sept. 22, 2003, at A1). Hydrogen refueling stations would lie every twenty miles along the highway, "allowing motorists to buy clean-burning hydrogen-fueled vehicles without fear they will run out of gas." *Id.*

108. For instance, New Mexico gives hybrid vehicle purchasers a one-time exemption from the motor vehicle excise tax and state sales tax, see HybridCars.com, Hybrid Incentives and Rebates—Region by Region, <http://www.hybridcars.com/local-incentives/region-by-region.html> (last visited Nov. 6, 2006), while Virginia allows hybrid vehicles to use the HOV lane regardless of the number of passengers in the car. See VA. CODE ANN. § 33.1-46.2(A)(6) (Supp. 2006). Unfortunately, hybrid owners' HOV privilege in Virginia expires on July 1, 2007. See *id.* Hybrid owners who are dissatisfied with the time limitation on the Virginia statute should consider moving to Florida, where no expiration date exists for a similar privilege. See FLA. STAT. ANN. § 316.0741(4) (West 2006). For a brief fifty-state and Canadian survey of hybrid incentives, see HybridCars.com, *supra*.

109. See Miguel Llanos, Carmakers Eye Green Pastures, Jan. 4, 2006, <http://www.msnbc.msn.com/id/9762170> (referencing a J.D. Power study that predicts hybrids will con-

nologies and consumer incentives are years away from mainstream viability and only nominally reduce CO₂ emissions in the short term.

Though automakers prefer tax incentives to regulation,¹¹⁰ California refuses to leave the choice in the hands of the consumer. In delineating the boundaries of CARB's regulatory authority, the legislature emphasized "the longstanding technology-forcing role of California regulation."¹¹¹ The California legislature specifically prohibited the CARB from: (1) imposing a tax "on any motor vehicle, fuel, or vehicle miles traveled," (2) banning the sale of any "vehicle category," such as sport utility vehicles; (3) requiring a "reduction in vehicle weight;" (4) reducing speed limits; or (5) limiting "vehicle miles traveled."¹¹² AB 1493's focus on short-term technological innovation reflects the California legislature's unwillingness to wait patiently for technology to develop at its own pace. By mandating strict, across-the-board emissions standards for all 2009 model automobiles sold in California, AB 1493 virtually guarantees that all Californians will eventually buy environmentally friendly vehicles. Admittedly, this guarantee does not come without an economic downside for consumers. The technological modifications auto manufacturers must make to meet AB 1493's emissions standards will augment the purchase price of automobiles sold in California.¹¹³

In 2009, CARB predicts that passenger cars and large trucks will, respectively, cost \$17 and \$36 more.¹¹⁴ By 2016, the last year of the mid-term emissions standards, this price increase will climb to over \$1000 for both classes of vehicles.¹¹⁵ The long-term cost advantages that result from AB 1493, however, could poten-

stitute 4.1% of new vehicles by 2012).

110. The Alliance of Automobile Manufacturers stated that "[c]onsumer tax incentives can help spur sales of [hybrid] vehicles. . . . The government should not pick winners and losers, but rather let consumers and the marketplace choose which technologies make sense for them." *Automakers Take California's Climate Emissions Rule to Court*, ENVTL. NEWS SERV., Dec. 8, 2004, <http://www.globalexchange.org/warpeacedemocracy/oil/2766.html>.

111. Air Resources Board, California Environmental Protection Agency, Climate Change Emission Control Regulations (Dec. 10, 2004), http://arb.ca.gov/cc/factsheets/cc_newfs.pdf.

112. CAL. HEALTH & SAFETY CODE § 43018.5(d) (West 2006).

113. See Air Resources Board, *supra* note 111.

114. See *id.*

115. See *id.* Industry experts claim that the technological improvements will increase the price of automobiles by \$3000, not \$1000. See NOW, *supra* note 62.

tially offset this one-time price increase. The emissions reduction technology will most likely result in “operating cost” savings which will make vehicles more fuel efficient.¹¹⁶ After subtracting the average consumer’s monthly car loan payment from monthly fuel expenditures, CARB discovered that consumers will save anywhere from \$3.50 to \$7.00 per month.¹¹⁷ These savings will add up over time to offset a portion of the increased purchase cost of vehicles sold in California. Although consumers will not experience tremendous long-term savings, ever-increasing gasoline prices should make any gain in fuel efficiency all the more attractive.

IV. CONCLUSION

The federal government’s unwillingness to pass legislation that would reduce CO₂ emissions has ushered in a new era of global warming regulation. The regulatory responsibility has devolved to state governments, and so far, many states have made valiant efforts to reign in CO₂ emissions. The Regional Greenhouse Gas Initiative represents the most expansive of these attempts. The seven states that comprise the RGGI have proven that interstate cooperation is possible, although only time will tell if this regional endeavor can succeed. When examining the RGGI, we must recalibrate our idea of success. In evaluating the RGGI, we should not consider actual CO₂ emissions reductions a factor dispositive of success. Instead, we should focus on the effectiveness of the cap-and-trade system and watch closely to see if retail electricity prices remain relatively stable. As long as the RGGI serves as a building block for other regional efforts to control emissions from stationary sources, it has served its purpose.

116. See Air Resources Board, *supra* note 111. The phrase “cost-effective,” as used in the context of AB 1493, refers to “greenhouse gas reductions that are economical to the owner of the vehicle, taking into account the *full life-cycle costs* of the vehicle.” Pew Center on Global Climate Change, Greenhouse Gas Standards for Vehicles, <http://www.pewclimate.org/states.cfm?ID=51> (last visited Nov. 6, 2006) (emphasis added). Notwithstanding the costs to consumers, “a July 2004 survey by the nonpartisan Public Policy Institute of California found that 81 percent of Californians support the law.” Natural Resources Defense Counsel, California Global Warming Emissions Rule: Legal Precedent Favors New Tailpipe Standard Despite Automaker Gripes (July 2004), available at http://www.calclean cars.org/factsheets/NRDC_0704.pdf.

117. See Air Resources Board, *supra* note 111.

The fight against mobile sources of CO₂ looks less promising, but AB 1493 remains a hopeful endeavor. California utilized its special status under the CAA to pass this piece of legislation, and other states have followed its lead. The barriers to AB 1493's success, however, are immense, and the legislation's opponents are formidable. If CARB's regulations manage to outlast a waiver request and a lawsuit, it would signify a tremendous victory for champions of global warming regulation.

As we move into an age where states carry the heavy burden of combating climate change, the effectiveness of subnational regulation remains uncertain. Efforts such as the RGGI and AB 1493 cannot effectively substitute for federal global warming regulation, but they can serve as regulatory models that the federal government can consult when it is forced to address climate change. In this manner, when the federal government finally confronts climate change, it can hit the ground running.

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