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# State Law Responses to Global Warming: Is It Constitutional to Think Globally and Act Locally?

DAVID R. HODAS\*

Over the past few years, the public policy news in America on global warming has generally fallen into two categories. Either the reports relate Bush Administration opposition to all international and national legal action addressing global warming, or the reports relate that yet another state or local government is adopting new laws or regulations to reduce or mitigate greenhouse gas (GHG) emissions. It is as though we live in two different countries. At the federal level, all policy makers oppose all efforts to control GHG emissions—from the Bush Administration's rejection of the Kyoto Protocol, to policies as subtle as the recent U.S. Department of Energy rule proposal that quietly removed language about tracking potential future credits industry might be entitled to for their voluntary, private GHG reduction projects.<sup>1</sup> Thus, despite occasional public protestations that it favors voluntary actions, the Bush Administration's actions send the message that the federal government will let all good climate change deeds be punished, for otherwise the public verification of private sector voluntary actions might give the private sector a stake in promoting a global warming legal regime.<sup>2</sup>

In contrast, policy initiatives at the state level generally<sup>3</sup> take the opposite approach, encouraging GHG mitigation actions,

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1. U.S. Dep't of Energy, General Guidelines for Voluntary Greenhouse Gas Reporting, 68 Fed. Reg. 68,204 (proposed Dec. 5, 2003) (to be codified at 10 C.F.R. pt. 300).

2. Comment of Marlo Lewis, Jr. on behalf of the Competitive Enterprise Institute to the United States Department of Energy 1-2 (June 5, 2002), *available at* <https://ostiweb.osti.gov/pighg/attachments/lewis.pdf>. "A crediting program would energize the 'greenhouse lobby'—the coalition of politicians, advocacy groups and companies supporting the Kyoto Protocol and kindred energy restraining policies." *Id.*

3. Alabama, Illinois, Kentucky, West Virginia, Wyoming, and Oklahoma are exceptions to the trend. *See* ALA. CODE § 22-28A-3 (2003). This section states:

whether big or small, at every turn.<sup>4</sup> Beginning over a decade ago, there has been a steady drumbeat of announcements of state and local initiatives to mitigate global warming from the emission of greenhouse gases (GHG).<sup>5</sup> There are various motivations for these developments, but it is fair to say that in one way or another, each initiative has been motivated by a combination of worry about the economic and environmental risks of global warming and future regulations of GHG emissions.<sup>6</sup> These state initiatives promote policy innovation, provide implementation experience and learning,<sup>7</sup> promote diversity of approaches, and “provide a forum for moving forward on climate change mitigation that is largely unavailable at the national level. . . .”<sup>8</sup> These activities are part of a long history of “bold experiment[ation] in cooperative federalism”<sup>9</sup> so central to environmental law, and especially air pollution law, in the United States.<sup>10</sup> Some form of cooperative federalism will be necessary for an effective GHG policy because the U.S.’s variety of GHG emitters and sinks is so numerous and

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Effective immediately, the Director of the Alabama Department of Environmental Management shall refrain from proposing or promulgating any new regulations intended in whole or in part to reduce emissions of greenhouse gases, as such gases are defined by the Kyoto Protocol, from the residential, commercial, industrial, electric utility, or transportation sectors unless such reductions are required under existing statutes.

*Id.*; see also 415 ILL. COMP. STAT. 140/15 (2003); KY. REV. STAT. ANN. § 224.20-125 (Michie 2003); OKLA. STAT. tit. 27A. § 1-1-207 (2003); W. VA. CODE § 22-23-1 (2003); WYO. STAT. ANN. § 35-11-213 (Michie 2003).

4. See Laura Kosloff & Mark Trexler, *State Climate Change Initiatives: Think Locally, Act Globally*, 3 NAT. RESOURCES & ENV’T 46 (Winter 2004).

5. See, e.g., John Dernbach & The Widener University Law School Seminar on Global Warming, *Moving the Climate Change Debate From Models to Proposed Legislation: Lessons From State Experience*, 30 ENVTL. L. REP. 10,933 (2000).

6. David R. Hodas, *Using Environmental Externalities to Regulate the Risk of Harm from Greenhouse Gas Emissions*, in SOCIAL COSTS AND SUSTAINABILITY 488 (O. Hohmeyer et al. eds., 1997).

7. See, e.g., Alan S. Manne & Richard G. Richels, *The Impact of Learning-By-Doing on the Timing and Costs of CO<sub>2</sub> Abatement*, Working Paper 02-8, AEI-Brookings Joint Center for Regulatory Studies (May 2002), available at <http://www.aei-brookings.org/publications/index.php?tab=topics&topicid=22#a2002>. Learning-by-doing, “the process by which the costs of new technologies decline as a function of cumulative experience” may not significantly change when shifting to a less carbon intensive economy, it can dramatically reduce (by between \$2 and \$3 trillion) the costs of reducing GHG emissions. *Id.* at 1, 10, 17 figure 6.

8. See Dernbach, *supra* note 5, at 10,949.

9. *Connecticut v. Env’tl. Prot. Agency*, 696 F.2d 147, 151 (2d Cir. 1982); see also *Union Elec. Co. v. Env’tl. Prot. Agency*, 427 U.S. 246 (1976); *Train v. Natural Res. Def. Council*, 421 U.S. 60 (1975).

10. See ROBERT V. PERCIVAL ET AL., *ENVIRONMENTAL REGULATION: LAW, SCIENCE AND POLICY* 101 (4th ed. 2003).

varied that any purely national-level response will have minimal chances for success.<sup>11</sup>

In the past two years, as states have become frustrated with the failure of the Bush Administration to develop national and international global warming mitigation policies, and with President George W. Bush's rejection of the Kyoto Protocol, that drumbeat from the states has become louder and more insistent.<sup>12</sup> For example, Governor Pataki of New York and the governors of nine other states in the northeast recently agreed "to develop a flexible, multi-state cap and trade . . . program from power plants . . . [that would be] the first multi-state greenhouse gas control program in the United States."<sup>13</sup> Maine passed a law in late June 2003 that requires Maine to reduce carbon dioxide (CO<sub>2</sub>) emissions to 1990 levels by 2010, and then to 90% of 1990 levels by 2020; Maine's "long-term object is to cut emissions by as much as 80%."<sup>14</sup> "Three Western States Announce Plan to Slash GHG Emissions" was the September 23, 2003 headline for the article describing the plan between Washington, Oregon, and California to reduce transportation sector GHG emissions, to provide renewable energy and energy efficiency standards, and to "coordinate their GHG emissions inventories."<sup>15</sup> In May 2003, "six Northeast States announced a voluntary greenhouse gas registry."<sup>16</sup> Regionally, the governors of New England states and the premiers of the provinces in eastern Canada (in total, eleven jurisdictions are involved) are collaborating to develop a regional approach to the reduction of GHGs.<sup>17</sup> In July 2002, California enacted Assembly

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11. See Dernbach, *supra* note 5, at 10,942.

12. See Richard Blumenthal & Kimberly Massicotte, *Seven States Notify EPA of Their Intent to Sue Over Global Warming*, 2003 ABA SEC. OF ENV'T, ENERGY & RES. 2-5, available at <http://www.abanet.org/enviro/committees/climatechange/newsletter/june03/globalwarming.htm> (last visited Jan. 10, 2004).

13. Press Release, Center for Clean Air Policy, The Center for Clean Air Policy Applauds Governor Pataki and Northeastern Governors [sic] Decision to Develop A Regional Cap and Trade Program for Carbon Emissions from Electric Utilities (July 25, 2003), available at [http://www.ccap.org/pdf/2003-July-25-CCAP\\_Applauds\\_NE\\_Govs\\_on\\_CO2\\_Initiative-Press\\_Release.pdf](http://www.ccap.org/pdf/2003-July-25-CCAP_Applauds_NE_Govs_on_CO2_Initiative-Press_Release.pdf).

14. Allison A. Freeman, *Maine Passes Law to Curb GHG Emissions*, GREENWIRE, June 30, 2003, at <http://www.eenews.net/Greenwire/Backissues/063003/06300307.htm> (last visited Jan. 10, 2004).

15. Brian Stempeck, *Three Western States Announce Plan to Slash GHG Emissions*, GREENWIRE, Sept. 24, 2003, at <http://www.eenews.net/Greenwire/Backissues/092303/09230303.htm> (last visited Jan. 10, 2004).

16. *Id.*

17. See Ken Colburn & Amy Royden, *New England States and Eastern Canadian Provinces Team Up to Tackle Climate Change*, 2003 ABA SEC. ENV'T, ENERGY & RES.

Bill 1493 to “require the [State Air Resources Board] to develop and adopt, by January 1, 2005, regulations that achieve the maximum feasible reduction of greenhouse gases emitted by passenger vehicles and light-duty trucks”<sup>18</sup> which would go into effect for 2009 model-year vehicles.<sup>19</sup>

States have also been actively pressing the federal government to address global warming. In 2002, the Attorneys General of eleven States (Alaska, California, Connecticut, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont) asked President Bush to reconsider his voluntary climate policies and to move instead toward “a ‘strong national approach’ to the ‘most pressing environmental challenge of the 21st century.’”<sup>20</sup> The Administration did not change its policy. These states also petitioned the EPA to list carbon dioxide (CO<sub>2</sub>) as a criteria pollutant under the Clean Air Act.<sup>21</sup> However, in the summer of 2003, EPA denied the various petitions to list carbon dioxide as a pollutant under the Clean Air Act. These states, with others, are now seeking judicial review of the denial.<sup>22</sup> These state legislative, policy, and litigation initiatives are but the tip of the iceberg of state and local legal proposals to reduce GHG emissions.<sup>23</sup>

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7, available at <http://abanet.org/environ/committees/climatechange/newsletter/june03/newengland/home.html> (last visited Jan. 10, 2004).

18. Symposium, *California's AB 1493: Trendsetting or Setting Ourselves Up to Fail?*, 21 UCLA J. ENVTL. L. & POL'Y 97, 129 (2002-2003).

19. *Id.* at 146-47.

20. Press Release, Office of New York State Attorney General Eliot Spitzer, States, Cities, Environmental Groups Sue Bush Administration on Global Warming, Challenge EPA's Refusal to Reduce Greenhouse Gas Pollution (Oct. 23, 2003), available at [http://www.oag.state.ny.us/press/2003/oct/oct23a\\_03.html](http://www.oag.state.ny.us/press/2003/oct/oct23a_03.html) (last visited Jan. 10, 2004) [hereinafter “Press Release, States, Cities, Environmental Groups”].

21. See 42 U.S.C. § 7408 (2000).

22. Press Release, States, Cities, Environmental Groups, *supra* note 20.

23. See, e.g., CENTER FOR CLEAN AIR POLICY, *Center for Clean Air Policy, State and Local Leadership on Transportation and Climate Change* (Jan. 2003). The center has reviewed: 1) programs in Maryland, New York, and New Jersey to fund energy efficiently and limit funding to projects that do not achieve climate change goals; 2) “location efficient” initiatives in Maryland, New York, New Jersey, Georgia, Illinois, Oregon, as well as policies in thirteen different cities; and 3) programs “encouraging environmentally friendly choices in a number of states and cities across the nation.” See also PEW CENTER ON GLOBAL CLIMATE CHANGE, *Climate Activities in the United States* (June 2002) (noting that “27 states have developed or are developing strategies of action plans to reduce net GHG emissions,” and that forty states have completed or will soon complete GHG inventories). Pew's database of state climate change initiatives currently describes forty-two case studies from twenty-seven different states that address transportation, agriculture, energy supply, energy demand, carbon sequestration and offsets, buildings, forestry, industry, waste management, and com-

How do states fit in to the global warming problem? Global warming is a unique and immensely complicated problem. GHGs that drive global warming are emitted from individual, local, natural, and human sources, and within a week they "typically are halfway around the world, making climate change a truly global issue."<sup>24</sup> Once emitted, these GHGs, particularly carbon dioxide (CO<sub>2</sub>), remain in the atmosphere trapping heat for a long time, up to a century. The resulting warming and climate change consequences, combined with the "large heat capacity of the oceans, and the long memory of other components of the climate system, such as ice sheets and the biosphere . . . are likely to persist for many centuries in the absence of appropriate mitigation measures."<sup>25</sup> Global warming is an international climate change phenomenon with local concerns: emissions are local, and impacts, although driven globally by the extra energy trapped in the atmosphere, are ultimately local. Both mitigation and adaptation must be local. Local action will be central to possible success of any international legal regime or policy initiative.

Often, when the world community generally recognizes an international problem, the international consensus results in a treaty creating an international legal regime<sup>26</sup> that responds to the problem.<sup>27</sup> Each nation that is party to the treaty must then adopt domestic law to implement the legal regime within its legal system.<sup>28</sup> The United Nations Framework Convention on Climate Change (Framework Convention) represents such a general global initiative.<sup>29</sup> It is a fundamental, although general, global agreement to limit "greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference

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prehensive cross-sectoral activities. See Pew Center on Global Climate Change, State and Local Net Greenhouse Gas Emissions Reduction Programs, at <http://www.pewclimate.org/states.cfm?view=all> (last visited Jan. 10, 2004); see also William Prindle et al., *American Council for an Energy-Efficient Economy, Energy Efficiency's Next Generation: Innovation at the State Level* (2003), at <http://www.aceee.org/pubs/e031full.pdf>.

24. Thomas R. Karl & Kevin E. Trenberth, *Modern Global Climate Change*, 302 SCIENCE 1719 (Dec. 5, 2003).

25. K. Hasselmann et al., *The Challenge of Long Term Climate Change*, 302 SCIENCE 1923 (Dec. 12, 2003).

26. See MARK W. JANIS, AN INTRODUCTION TO INTERNATIONAL LAW 210 (3d ed. 1999).

27. See *id.* at 229-34.

28. *Id.* at 227-33.

29. *United Nations Conference on Environment and Development: Framework Convention on Climate Change*, 5th Sess., pt. 2, U.N. Doc. A/AC.237/18 (1992), 31 I.L.M. 849 (1992) (entered into force as law March 1994).

with the climate system.”<sup>30</sup> Because no single country caused or can abate the momentum of rapid global warming, the Framework Convention obligates each country of the world to work towards the stabilization goal. However, the Framework Convention is not self-enforcing; each nation must meet its obligation through its own local abatement, mitigation and adaptation activities, or in conjunction with other nations.

As international law, the Framework Convention establishes general goals and imposes general obligations on the parties (nations). Various nations’ subsequent negotiations have led to targets that are more concrete and timetables for reducing greenhouse gases by various nations. The centerpiece of this difficult process is the Kyoto Protocol to the Framework Convention, which requires developed countries to reduce greenhouse gas emissions five to eight percent below their 1990 levels by 2008-2012;<sup>31</sup> negotiations are now beginning for post-2012 commitments. Under the Kyoto Protocol, President Clinton, in 1997, agreed that the United States would be required to reduce its GHG emissions by seven percent by 2008-2012. However, President Bush subsequently rejected the Kyoto Protocol in 2001.

However, the Kyoto Protocol has not yet entered into effect as binding international law. By its terms, it will not enter into effect as law until it is ratified by at least fifty-five parties to the Framework Convention, and by Framework Annex 1 nations (essentially the developed nations) that represent 55% of Annex 1 nations’ 1990 GHG emissions. As of November 26, 2003, 120 countries have ratified the protocol, but the ratifying Annex 1 nations account only for 44.2% of GHG emissions.<sup>32</sup> The Protocol can enter into effect only if either Russia (17.4%) or the U.S. (36.1%) ratify; no other non-ratifying Annex 1 nation has a large enough percentage to make a difference. Since the Bush Administration has rejected the Kyoto Protocol, its fate rests upon Russia.<sup>33</sup> Even if Russia were to ratify, so that the Kyoto Protocol entered into effect as international law, the U.S. view is that it is

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30. *Id.* at 854.

31. *Conference of the Parties to the Framework Convention on Climate Change: Kyoto Protocol*, U.N. Doc. FCCC/CP/1997/L/Add.1, art 3.1 (1997), 37 I.L.M. 22 (1998).

32. See U.N. Framework Convention on Climate Change Kyoto Protocol Thermometer, at <http://unfccc.int/resource/kpthermo.html> (last visited Jan. 10, 2004).

33. Russia is still considering whether to ratify, but has been cryptic as to the issues it is most concerned about. See Eric J. Lyman, *Russian Statements Doubting Kyoto’s Value Dominate Talk at Global Warming Conference*, 26 INT’L ENV’T RPT’R. 961, 966 (2003).

not bound to the Protocol's obligations. Ironically, the delay of Russia and the refusal of the U.S. could accelerate changes in the U.N. process for setting GHG emission reduction goals.<sup>34</sup>

What does all this have to do with the U.S. Constitution? At first glance, not much. Treaties, if ratified by the Senate, are the law of the land, binding on the states directly, if they are self executing,<sup>35</sup> or indirectly, by empowering Congress to enact implementing legislation that is binding on the states,<sup>36</sup> unless the treaty directly violates a constitutional prohibition.<sup>37</sup> But the Kyoto Protocol has not been presented to the Senate, let alone been ratified. Moreover, it is well within the President's constitutional foreign affairs power and treaty making power to reject a signed, but un-ratified treaty, and to not submit it to the Senate for its "Advice and Consent."<sup>38</sup> Thus, the Kyoto Protocol is not binding upon the U.S. as a nation, nor is it part of the federal law of the U.S, which controls state actions under the Supremacy Clause.<sup>39</sup>

However, failure of leadership at the federal level has not changed the reality that GHG emissions are increasing, that global temperatures are rising, and that many Americans are concerned enough about this problem to want to take some action. As a result, in the absence of federal leadership, many states and local governments have adopted laws to regulate GHG emissions at the state and local level. But, constitutionally, can the states regulate GHG emissions when the President has rejected the Kyoto Protocol because in his view it is harmful to the economic interests of the U.S.? This paper will explore that question by examining several constitutional doctrines that limit state activities within our federal system, preemption, Foreign Affairs, and the dormant commerce clause, to see if they might be applicable in this context. In other words, is it constitutional for states to worry internationally, but respond locally?

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34. *Id.* at 965.

35. *See Asakura v. Seattle*, 265 U.S. 332, 341-44 (1924).

36. *Missouri v. Holland*, 252 U.S. 416, 434 (1920).

37. *Reid v. Covert*, 354 U.S. 1, 16 (1957) ("no agreement with a foreign nation can confer power on the Congress, or any other branch of Government, which is free from the restraints of the Constitution.").

38. U.S. CONST. art. II, § 2, cl. 2 ("[The President] shall have the Power, by and with the Advice and Consent of the Senate, to make Treaties. . . .").

39. U.S. CONST. art. VI, § 1, cl. 2.



### The Basics of Global Warming

The earth is warmed, and made livable, by the presence of greenhouse gases, such as carbon dioxide, methane, and nitrous oxide, in the atmosphere that trap some of the heat of the sun.<sup>40</sup> The greater the concentration of GHG in the atmosphere, the warmer the planet will be. Thus, Venus, with an intense GHG concentration, is hot enough to melt lead. The lower the concentration, the cooler the planet—hence Mars and the moon, with scant or no atmospheres, are frigid. Over the scope of human history, the earth's GHG has been relatively stable. However, since the rise of the industrial revolution the concentration has risen rapidly, primarily due to anthropogenic activities. This rise in GHG concentration will trap more heat in the atmosphere, which will change the earth's climate.

Both the rate and quantity of the GHG concentration are important. To put the changes in context, the rise of GHG concentrations in the last 150 years has interfered with the atmosphere's energy flow, trapping about one percent more energy than before.<sup>41</sup> If the associated climate change were to occur over hundreds of thousands or millions of years, as has been true in the distant past, the effects would be invisible to human society and the earth's ecosystem—both would easily adapt at that pace of change. However, the GHG increases, and associated temperature increases, will both occur rapidly (almost instantaneously) with the context of human existence and ecosystem adaptation rates, and will "far exceed[] the natural climate . . . variability experienced in the past 10,000 years."<sup>42</sup>

For purpose of this article, it is not necessary to review the extensive science of climate change. That is readily available elsewhere.<sup>43</sup> What is important is to understand that greenhouse gas

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40. Karl & Trenberth, *supra* note 24, at 1719 ("Planet Earth is habitable because of its location relative to the sun and because of the natural greenhouse effect of its atmosphere."). Each day, on average, the sun sends about 175 petawatts (PW, or 175 quadrillion watts) to the earth. About 31% is reflected back into space, and the rest of the energy is absorbed by the atmosphere (about 120 PW). *Id.* at 1719-20.

41. *Id.* This one percent change in energy flow "dominates all other direct influences humans have on climate." One percent more energy in the atmosphere is about 1.2 PW. One PW "is equivalent to [the energy output] of a million power stations of 1000-MW capacity. . . . Total human energy use is about a factor of 9000 less than the natural flow." *Id.* at 1720. Thus, cumulative human GHG emissions are trapping about ninety times more energy in the atmosphere than we actually use in a year. *Id.*

42. Hasselmann, *supra* note 25, at 1923.

43. See generally, INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2001: THE SCIENTIFIC BASIS (J.T. Houghton et al., eds. 2001), available at

concentrations for the three major GHGs, carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O), have increased substantially since 1850.<sup>44</sup> These increases are primarily the result of human activities, such as the burning of fossil fuels such as petroleum, oil and natural gas (CO<sub>2</sub>), cultivating rice in paddies, maintaining herds of cattle and dairy cows, coal mining and natural gas transportation (CH<sub>4</sub>), and tilling and fertilizing soils to grow crops (N<sub>2</sub>O).<sup>45</sup> These human-caused increases have caused global temperatures to rise by 0.6° C ± 0.2° C since the late nineteenth century.<sup>46</sup> Both the GHG increases and temperature increases contain the human fingerprint as the culprit.<sup>47</sup> The predictions that the earth will experience increased warming from existing emissions and future emissions is estimated to increase by 2100 to 1.4° to 5.8° C from 1990 temperatures, depending on the emissions scenario the world follows<sup>48</sup> and assuming no large-scale singularities (nonlinear responses due to unanticipated feedback loops) that could trigger runaway warming or other catastrophic problems.<sup>49</sup>

The range and intensity of the potential consequences to human society and the world's ecosystems is both broad and great. Although computer models are unable to narrow the predictions to small areas or regions, they do broadly project the dangers inherent in the warming trend.<sup>50</sup> Within the U.S. these consequences can be translated into concerns specific to individual states. Coastal states face rising sea levels (about two meters by 2100), increased storms, and increased salinity of rivers, estuaries, and related ground water.<sup>51</sup> Mountain snowcaps, glaciers and sea ice will shrink or disappear, slowing ocean currents, adversely affecting forestry, agriculture, fresh water supply, and maritime re-

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[http://www.grida.no/climate/ipcc\\_tar/wg1/index.htm](http://www.grida.no/climate/ipcc_tar/wg1/index.htm) (last visited Jan. 10, 2004) [hereinafter CLIMATE CHANGE].

44. CO<sub>2</sub> has risen about 31% from stable pre-industrial (around 1750) levels, methane (CH<sub>4</sub>) has risen about 151%, and Nitrous Oxide (N<sub>2</sub>O) has risen 15%. Carbon dioxide concentrations continue to increase at 1.5 ppb, methane at 7 ppb/year, and N<sub>2</sub>O at 0.8 ppb/year. *Id.* at 6-7, 92-93.

45. *Id.* at 5-7.

46. *Id.* at 2.

47. *Id.* at 5, 60, 728.

48. *Id.* at 69.

49. *Id.*

50. Scientists now use improved supercomputer technology in global climate modeling, and ever-increasing improvements in the climate models, will soon produce more detailed predictions, as well as a better sense of the possibility of catastrophic consequences. CLIMATE CHANGE, *supra* note 43, at 473-76.

51. *Id.* at 74-75.

sources.<sup>52</sup> Increased disease from heat stress and reappearance of disease vectors, *e.g.*, malaria carrying mosquitoes) will burden states' public health resources.<sup>53</sup> Precipitation changes will cause increased flooding, more profound droughts, and the more frequent occurrence, with greater intensity, of extreme weather events, such as droughts.<sup>54</sup> The Bush Administration appears unconcerned about these risks, having rejected the Kyoto Protocol, and having refused to offer any alternative.

### State Responses to the Risks of Global Warming

Many States, which had made modest efforts to address local concerns about climate change, have now been much more active. Early state regulatory responses to climate change appeared in the late 1980s, as various state public service commissions began to consider the idea of including external environmental costs<sup>55</sup> in choosing among various alternatives for new electric power supply.<sup>56</sup> By the mid-1990s about half the states, through their public service commissions, had adopted regulatory mechanisms to evaluate proposed projects' total environmental costs, including costs associated with the climate change effects of the proposed plants.<sup>57</sup> This decision-making tool was developed as an attempt to identify the long term, "least cost" option to the states' citizens. By including a dollar value for harm the residual emissions would produce (*i.e.*, those emissions the plants released after complying with all applicable environmental laws), the regulatory commissions were seeking to internalize the environmental externalities of power production into economic decision-making. States based

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52. INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2001: IMPACTS, ADAPTATIONS AND VULNERABILITY 7-17, 28-61 (J.J. McCarthy et al. eds., 2001), available at [http://www.grida.no/climate/ipcc\\_tar/wg2/index.htm](http://www.grida.no/climate/ipcc_tar/wg2/index.htm).

53. *Id.* at 12, 451-78, 570.

54. CLIMATE CHANGE, *supra* note 43, at 92.

55. An environmentally costed project would include both the project's traditional financial cost and the monetary value of the harm the emissions of the plant would impose on society.

56. For an early example of the advocacy of his approach, see Ralph C. Cavanagh, *Least Cost Planning Imperatives For Electric Utilities and Their Regulators*, 10 HARV. ENVTL. L. REV. 299 (1986).

57. ENERGY INFORMATION AGENCY, ELECTRICITY GENERATION AND ENVIRONMENTAL EXTERNALITIES: CASE STUDIES (1995), available at <http://www.eia.doe.gov/cneaf/electricity/eternal/external.pdf>.

major investments on the "true" short- and long-term costs of the power project.<sup>58</sup>

The emission of CO<sub>2</sub>, the principle GHG, creates a significant externality which economic theory requires be internalized. However, CO<sub>2</sub> does not directly cause environmental and human health problems, it only traps more heat in the atmosphere. As a result, many state Public Service Commissions (PSCs) turned to proxies to establish an externality value for greenhouse gases.<sup>59</sup> Those persons opposed to using this decision-making device argued that it was beyond the jurisdiction of PSC's because it was akin to environmental regulation,<sup>60</sup> which was the job of EPA (at the federal level) and state environmental agencies, and also was bad policy.<sup>61</sup> Those behind this policy tool responded that it was just sound economic regulation for the public good—the central mission of utility regulation. There are several reasons to consider the full environmentally priced cost of power plants.<sup>62</sup> First, internalizing externalities conforms to standard economic theory. As the externalities become significant, it is society that pays the costs by absorbing the damage, which amounts to an unwarranted subsidy of polluting plants. Second, since new power plants are major capital commitments, that will last at least forty to fifty years, failure to anticipate the possibility of future regulation of the residual emissions, and the potential costs associated with

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58. For a more detailed analysis of this idea in the context of federalism, see Kirsten H. Engel, *The Dormant Commerce Clause Threat to Market-Based Environmental Regulation: The Case of Electricity Deregulation*, 26 *ECOLOGY L.Q.* 243 (1999).

59. See, e.g., *In Re* Quantification of Env'tl. Costs, 150 P.U.R.4th 130 (Minn. Pub. Util. Comm'n 1994); *In Re* Calculation and Use of Cost-effectiveness Levels for Conservation, 152 P.U.R.4th 58 (Or. Pub. Util. Comm'n 1994) (publication pages not available) (noting that "costs related to . . . carbon dioxide are likely to be internalized in some form within the 20 year planning horizon."); *In Re* Cent. Vt. Pub. Serv. Corp., No. 5624, 1994 WL 400909, \*7 (Vt. Pub. Serv. Comm'n 1994) (requiring the addition of a 5% allowance to base costs for "external costs of producing that energy, such as contributions to . . . global warming."); *In Re* Mont. Power Co., 152 P.U.R.4th 403 (Mont. Pub. Serv. Comm'n 1994) (publication pages not available) (ordering the utility "to include cost estimates for externalities in its next rate filing . . . although such estimates are uncertain it is inappropriate to continue to design rates under the assumption that the value for externalities is zero. At a minimum the utility must estimate damage costs associated with carbon dioxide," and other pollutants to "reflect impacts on human health, agriculture, timber, livestock, ecosystems and biodiversity, global climate, recreation, visual and audio aesthetics, and land use (including property values).").

60. See, e.g., *Mass. Elec. Co. v. Dep't of Pub. Utils.*, 643 N.E.2d 1029 (Mass. 1994).

61. See, e.g., Bernard S. Black & Richard J. Pierce, Jr., *The Choice Between Markets and Central Planning in Regulating the U.S. Electricity Industry*, *COLUM. L. REV.* 1339 (1993).

62. See Hodas, *supra* note 6.

complying with the new regulations, would be unsound economic decision-making.

State courts that reviewed challenges to these regulations have generally upheld the idea that the consideration of environmental externalities is a proper economic regulatory exercise of PSC.<sup>63</sup> To the extent that state courts restricted the power of the PSC to consider externalities, that restriction applied only to pollutants already regulated by state and federal environmental agencies.<sup>64</sup> However, under that approach, greenhouse gases such as CO<sub>2</sub>, which are entirely unregulated, could be evaluated for their environmental externalities, particularly if the PSC found that there was a significant risk of future regulation of that gas.<sup>65</sup>

Although many states and local governments have explored, and even adopted, measures to control GHG for sometime now,<sup>66</sup> the election of President George W. Bush, and his rapid policy shift to reject the Kyoto Protocol, has accelerated state and local measures. Frustration with the Bush Administration's failure to propose an alternative to Kyoto has been a major impetus behind recent state efforts. However, it is not the sole factor. Many states see some kind of GHG regulation to be inevitable. Some seek to engage in early, low cost measures that will give them a competitive advantage when the game begins. Others are experimenting with alternative policy approaches to see what does and does not work in their area.

The list of state and local laws addressing global warming is very long and growing rapidly. Some are comprehensive while others are sector-driven. Some are regulatory, others voluntary or market based; some seek to control GHG emissions, others seek to

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63. See, e.g., *In the Matter of Quantification of Env'tl. Costs*, 578 N.W.2d 794 (Minn. Ct. App. 1998).

64. *Mass. Elec. Co. v. Dep't of Pub. Utils.*, 643 N.E.2d 1029, 1033-34 (Mass. 1994). Specifically, the court held that although the Massachusetts D.P.U. lacks the power "to consider the overall impact of pollution on society," the D.P.U.

[M]ay direct the avoidance of conditions that a utility might experience, provided that reasonably anticipated future circumstances will impose costs on the utility. . . . [I]f it reasonably appears that the current emission of a pollutant in lawful amounts will be affected in the foreseeable future by a prohibition, new restriction, costly regulation, or pollution penalties or taxes, for example, the department has the authority as a rate regulator to consider the appropriateness of avoiding that reasonably foreseeable change and requiring that the utility pursue a course likely to be less costly to the ratepayers in the long term.

*Id.*

65. *Id.*

66. See Dernbach, *supra* note 5.

promote carbon sinks. Some are regional, even international in scope, while others are local. Even within particular approaches, there is much variety. For instance, some economics-based approaches anticipate emissions credits and market trading, others look to taxes and pricing mechanisms to change consumer behavior, and others look to supplant electricity regulation with market oriented performance standards such as renewable portfolio standards, environmentally costed integrated resource planning, and environmental system benefits charges. Obviously, this article is not the place to evaluate the particulars of these approaches.<sup>67</sup> Rather, this article will consider on a more general level whether these, or other, efforts by states to act locally on the global warming problem offend federalism conceptions of the constitution, particularly the foreign affairs power of the national government.

Under the Constitution, a federal government of limited powers rules us: Congress may only enact legislation within one of the areas of power granted to it.<sup>68</sup> In contrast, the several states that comprise our country possess, under the Constitution of 1787,<sup>69</sup> full, unbridled police power, or what James Madison called “the numerous and indefinite”<sup>70</sup> power of the states, that is presumptively plenary, subject only to the states’ own constitutions and specific limitations in the U.S. Constitution.<sup>71</sup> Thus, under the Constitution of 1787, a state could enact any law it wished, except for a small variety of laws specifically prohibited by the constitution, such as laws regulating interstate and foreign trade,<sup>72</sup> state treaties with other countries,<sup>73</sup> and ex post facto laws or bills of attainder;<sup>74</sup> nor could a state deny a citizen of another state the privileges and immunities enjoyed by the state’s own citizens.<sup>75</sup>

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67. For a proposed analytic model to evaluate state law developments, see Kosloff & Trexler, *supra* note 4.

68. *McCulloch v. Maryland*, 17 U.S. (4 Wheat.) 316 (1819). Under the Constitution of 1787 and the Bill of Rights, these powers were essentially those enumerated in Article 1, section I, clause 18 (or those that were “necessary and proper” to effect an enumerated end).

69. Any particular state may, under its state constitution, limit the scope of that state’s police power. Such a limitation would be an artifact of state law, rather than a diminishment of power mandated by the U.S. Constitution.

70. *THE FEDERALIST* No. 45, at 137 (James Madison) (Roy P. Fairchild ed., 1986).

71. U.S. CONST. amend. X.

72. *Id.* art. I, § 8, cl. 3.

73. *Id.* art. I, § 10, cl. 1.

74. *Id.*

75. *Id.* art. IV, § 2.

Moreover, the Bill of Rights did not apply to the states, and so it was not a constitutional restriction on state law.<sup>76</sup>

This allocation of and limitation on power changed drastically as a result of the Civil War. The Civil War answered the question as to whether states could voluntarily secede from the Union: they cannot. It also resulted in states being subject to federal constitutional limitations designed to protect individual liberties.<sup>77</sup> It was initially thought that the Fourteenth Amendment did not subject states to the prohibitions in the Bill of Rights.<sup>78</sup> However, in the late nineteenth century the Supreme Court's campaign to protect "economic rights" from interference by states led it to reverse its long-standing rule that the Bill of Rights did not limit state action by applying the Fifth Amendment's just compensation clause to state law.<sup>79</sup> Thus began the Court's controversial exploration of which rights in the first eight amendments should be "incorporated" into the meaning of "liberty" in due process clause of Fourteenth Amendment.<sup>80</sup> As a result, the previously relatively unbridled state police power is now subject to a wide array of prohibitions designed to enhance personal liberty and reduce the power of states to act arbitrarily with respect to individual rights.<sup>81</sup>

Defining the scope of federal legislative power, and prohibitions on the use of that power, of the United States and the several states is only the beginning of our analysis of whether state laws affecting GHG emissions are constitutional. Where valid federal law and state law conflict, the Constitution declares the rule, which shall be obeyed by all judges, that the federal law is the "supreme law of the land" despite any state law to the contrary.<sup>82</sup> Thus, absent a conflict between federal and state law, or

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76. See, e.g., *Barron v. Mayor and City Council of Baltimore*, 332 U.S. (7 Pet.) 243, 250-51 (1833) (holding that the Fifth Amendment's taking clause did not apply to state actions: "the [just compensation] provision of the fifth amendment . . . is intended solely as a limitation on the exercise of power by the government of the United States, and is not applicable to the legislation of the states.").

77. See U.S. CONST. amend. XIII (prohibition of slavery); U.S. CONST. amend. XIV (due process, equal protection, and privileges and immunities clauses); U.S. CONST. amend. XV (prohibiting states from denying voting rights on the basis of race, color or previous condition of servitude).

78. *The Slaughter-House Cases*, 83 U.S. (16 Wall.) 36 (1873).

79. See *Chicago, Burlington & Quincy R.R. v. Chicago*, 166 U.S. 226 (1897).

80. See KATHLEEN M. SULLIVAN & GERALD GUNTHER, *CONSTITUTIONAL LAW* 433-50 (14th ed. 2001).

81. See, e.g., *Duncan v. Louisiana*, 391 U.S. 145 (1968).

82. U.S. CONST. art. VI, § I, cl. 2.

a state law that violates one of the limited set of constitutional prohibitions, states faced no other explicit federal constitutional constraint.

However, state power has also been constrained by judicially articulated federalism doctrines derived from the structure of the Constitution, not its explicit language. From the Supremacy Clause comes the preemption doctrine, which preempts state laws that Congress expressly preempts, when federal law occupies the field, or where the law, generally or as applied, obstructs a federal law from achieving its purpose.<sup>83</sup> Another judicially announced federalism limitation on state power has been derived from the Commerce Clause. Known as the dormant commerce clause, this doctrine bars any otherwise valid state laws that discriminate against interstate commerce or unduly burden interstate commerce.<sup>84</sup> Much has already been written generally about preemption and the dormant commerce clause, and specifically about the application of preemption<sup>85</sup> and the dormant commerce clause<sup>86</sup> to state laws regulating GHG and other air pollutants. This article will not reiterate what has already been said, but will merely apply the doctrines to the field of state and local GHG laws.

A third federalism limit on state power is the foreign affairs power, which resides in the President's fundamental executive powers,<sup>87</sup> as well as in certain powers granted to Congress, such as the power to regulate commerce with foreign nations, to declare war, raise and maintain military forces, ratify treaties and approve international agreements, establish rules for immigration and naturalization, fund foreign aid programs, and to participate in international institutions such as the United Nations, the World Bank, the International Monetary Fund, and the North

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This Constitution, and the Laws of the United States which shall be made in Pursuance thereof; and all Treaties made, or which shall be made, under the Authority of the United States, shall be the supreme law of the land; and the Judges in every State shall be bound thereby, any Thing in the Constitution or Laws of any State to the Contrary notwithstanding.

*Id.*

83. *Gade v. Nat'l Solid Waste Mgmt. Ass'n*, 505 U.S. 88, 98 (1992).

84. *Hughes v. Oklahoma*, 441 U.S. 322 (1979); *Philadelphia v. New Jersey*, 437 U.S. 617 (1978).

85. See, e.g., Rachel L. Chanin, Note, *California's Authority to Regulate Mobile Source Greenhouse Gas Emissions*, 58 NYU ANN. SURV. AM. L. 699 (2003).

86. See, e.g., Engel, *supra* note 58.

87. U.S. CONST. art. II, § 2, cl. 2.



American Treaty Organization (NATO).<sup>88</sup> The foreign affairs powers of the federal government have received considerably less analytic attention than federalism generally, and almost no attention in the context of GHGs, or international environmental law. In the context of GHG regulations to stem global warming, where states are thinking globally, but acting locally, we must consider whether federal law preempts these efforts, violates the dormant commerce clause, or unconstitutionally limits the foreign affairs power of the President.

One of the great constitutional questions debated today is what the relative power of the federal government and of the several states should be. The tension between the federal government and the states has been central to our nation's history.<sup>89</sup> The necessity of a national government led to the abandonment of the Articles of Confederation and the adoption of our Constitution, which established a national government of limited powers, reserving to the States all their police powers not given away or prohibited in establishing the federal government.<sup>90</sup> Although a government of limited powers, the federal law was established to be supreme law of the land where those powers were properly exercised.<sup>91</sup> However, during the last decade the definition of the federal government's enumerated powers has been subjected to judicially declared "federalism" limitations. For instance, the Court has held that the inherent federalism structure of the Constitution prohibits Congress from "commandeering" the executive or legislative branches of state government to achieve federal goals,<sup>92</sup> and limits Congress' power to allow citizens to sue states for violations of federal law.<sup>93</sup>

From an environmental law perspective this structure was not problematic, since in the 1970's, when most of the modern environmental law statutes were enacted, the commerce clause was

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88. *Id.* at art. I, § 8; see generally LOUIS HENKIN, *FOREIGN AFFAIRS AND THE CONSTITUTION* (1972).

89. *New York v. United States*, 505 U.S. 144, 149 (1992) (describing federalism as possibly the "oldest question of constitutional law.").

90. See *McCulloch v. Maryland*, 17 U.S. (4 Wheat.) 316 (1819).

91. *Id.* at 405 ("The nation on those subjects on which it can act, must necessarily bind its component parts."); see also U.S. CONST. art. VI, § 1, cl. 2.

92. See, e.g., *New York v. United States*, 505 U.S. 14 (1992); *Printz v. United States*, 521 U.S. 898 (1997). Compare *Garcia v. San Antonio Metro. Transit Auth.*, 469 U.S. 528 (1985), with *Nat'l League of Cities v. Usury*, 426 U.S. 833 (1976).

93. *Alden v. Maine*, 527 U.S. 706 (1999); *Bd. of Trs. of Univ. of Ala. v. Garrett*, 531 U.S. 356 (2001).

so broadly interpreted that the environmental laws easily fit,<sup>94</sup> and the statutes reflected a new conception, cooperative federalism, which avoided federalism and Eleventh Amendment (state sovereignty) concerns.<sup>95</sup> Nor did these statutes impede state efforts to protect their environment since Congress generally allowed states to enact more stringent requirements than the minimum national standards the federal laws imposed.<sup>96</sup>

However, the federalism superstructure upon which the federal environmental laws were built has undergone significant modification in recent years. The post New Deal conception of a broadly conceived Commerce Clause, and the great deference of the Supreme Court towards congressional findings, no longer exists.<sup>97</sup> Not only has the Court become more circumspect about the scope of legislative power Congress has under the Commerce Clause, it has also limited Congress' power on the basis of new articulations of federalism that derive, so the Court says, from the basic constitutional structural relationship between the national government and the sovereign power of the states. In this view, the Tenth Amendment is no longer merely a truism, but is a metaphor for some essential state sovereignty that federal power cannot limit.<sup>98</sup>

In the current Court's view, a federalism doctrine that bolsters the relative power of the states and protects the dignity of state sovereignty is essential.<sup>99</sup> According to Justice Kennedy, in creating our federalist system, the nation's founders "split the atom of sovereignty."<sup>100</sup> In these Justices' view, federalism is a

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94. See, e.g., *Wickard v. Filburn*, 317 U.S. 111 (1942); *Katzenbach v. McClurg*, 379 U.S. 294 (1964); *Perez v. United States*, 402 U.S. 146 (1971). Recent Supreme Court Commerce Clause decisions do not appear to change this view substantially. See *United States v. Lopez*, 514 U.S. 549 (1995); but cf. *Solid Waste Agency of N. Cook County v. U.S. Army Corps of Eng'rs*, 531 U.S. 159 (2001).

95. See, e.g., 42 U.S.C. § 7410 (2000) (the Clean Air Act section creating state implementation plans as the primary vehicle for implementing national ambient air quality standards); 33 U.S.C. § 1251(b) (2000) (the Clean Water Act states that it is the "policy of the Congress to recognize, preserve, and protect the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution. . . ."); 33 U.S.C. § 1341 (requires state water quality certification for federal water discharge permits); 33 U.S.C. § 1342(b) (allows state Clean Water Act permit programs).

96. See, e.g., 33 U.S.C. §§ 1365(e), 1370.

97. The implication of Commerce Clause jurisprudence on federal environmental laws are addressed in depth by Bradley Bobertz's article in this symposium edition.

98. See *United States v. New York*, 505 U.S. 144 (1992); *Printz v. U.S.*, 521 U.S. 898 (1997).

99. See *Fed. Mar. Comm'n v. S.C. State Port Auth.*, 535 U.S. 743 (2002).

100. *U.S. Term Limits, Inc. v. Thornton*, 514 U.S. 779, 838 (1995) (Kennedy, J., concurring).

fundamental structural support of our democratic republic. Federalism, as articulated by the current Court's majority, preserves an important role for states to prevent tyranny,<sup>101</sup> preserves a level of government that is (in theory, at least) more sensitive and accountable to the needs of its citizens, and promotes vital innovation and experimentation.<sup>102</sup> To achieve this federalism ideal, the Court must carefully circumscribe and examine Congress' use of its legislative power.<sup>103</sup>

This revived federalism doctrine has been used to limit the power of the federal government by limiting the scope of the Commerce Clause, expanding the Tenth Amendment to be an affirmative limit on federal power over state government, and by expanding the meaning of the Eleventh Amendment to protect states from lawsuits based on federal law.<sup>104</sup> However, it is not clear yet whether the new federalists will, and if so, how, rein in the power of the federal government when applying other federalism related doctrines. For instance, the Court originally developed the dormant commerce clause to restrict states from interfering with or discriminating against interstate commerce, even where Congress was silent.<sup>105</sup> Thus, even when Congress had not regulated or addressed a particular interstate commerce concern, states were restricted in the scope of their activities. This long-standing doctrine<sup>106</sup> is consistent with the nationalist concerns of the framers, who abandoned the Articles of Confederation in large part because of state restrictions on the free flow of commerce.<sup>107</sup> However, the new federalists, who favor enhancing the role of states in our federal system, might rule that the dormant commerce clause jurisprudence has gone too far in the direction of protecting the national government against the states,

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101. *Gregory v. Ashcroft*, 501 U.S. 452, 458 (1991).

102. *See New State Ice Co. v. Liebman*, 285 U.S. 262, 311 (1932) (Brandeis, J., dissenting) ("It is one of the happy incidents of the federal system that a single courageous state may, if its citizens choose, serve as a laboratory; and try novel social and economic experiments without risk to the rest of the country.").

103. *See Bd. of Trs. of Univ. of Ala. v. Garrett*, 531 U.S. 356 (2001).

104. *See the evolution of Eleventh Amendment federalism jurisprudence in Seminole Tribe of Florida v. Florida*, 517 U.S. 44 (1996); *Alden v. Maine*, 527 U.S. 706 (1999); *Board of Trustees of University of Alabama v. Garrett*, 531 U.S. 356 (2001); *Federal Maritime Comm. v. South Carolina State Port Authority*, 535 U.S. 743 (2002); *Nevada Dep't of Human Resources v. Hibbs*, 538 U.S. 721 (2003).

105. *See Hunt v. Wash. State Apple Adver. Comm'n*, 432 U.S. 333 (1977).

106. *See Gibbons v. Ogden*, 22 U.S. (9 Wheat.) 1 (1824).

107. *See, e.g., H.P. Hood & Sons, Inc. v. DuMond*, 336 U.S. 529 (1949); Donald H. Regan, *The Supreme Court and State Protectionism: Making Sense of the Dormant Commerce Clause*, 84 Mich. L. Rev. 1091 (1986).

thereby unduly burdening states' abilities to address state concerns.<sup>108</sup> To date, however, the Court has not yet attempted to recalibrate the dormant commerce clause to be more deferential to state interests.

Thus, federalism limits on state GHG statutes might emerge from the dormant commerce clause. Dormant commerce clause concerns might be acute when states are regulating electric utilities by favoring in-state resources over out-of-state fuels,<sup>109</sup> or by discriminating against out-of-state electricity generators over in-state suppliers.<sup>110</sup> However, states may legitimately use their traditional power to regulate natural electricity monopolies without violating the dormant commerce clause, even if out-of-state suppliers of electricity may incidentally be adversely affected.<sup>111</sup> Thus, a state may impose an externality valuation in regulating utilities, so long as the valuation does not discriminate against interstate commerce or out-of-state interests.<sup>112</sup> Nor may state regulatory control of electric utilities be used to impair trading of SO<sub>2</sub> emissions allowances under the Clean Air Act, even if a down-wind state believes that trades by in-state utilities to utilities in up-wind states will have a direct, adverse impact on air quality in the down-wind state.<sup>113</sup> Thus, unless state statutes, regulations,

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108. See, e.g., *City of Philadelphia v. New Jersey*, 437 U.S. 617, 632-33 (1978). Justice Rehnquist, dissenting, stated,

I do not see why a State may ban the importation of items whose movement risks contagion, but cannot ban the importation of items which, although they may be transported into the State without undue hazard, will then simply pile up in an ever increasing danger to the public's health and safety. The Commerce Clause was not drawn with a view to having the validity of state laws turn on such pointless distinctions.

*Id.*

109. See *Alliance for Clean Coal v. Miller*, 44 F.3d 591 (7th Cir. 1995); see also *Alliance for Clean Coal v. Bayh*, 72 F.3d 556 (7th Cir. 1995). For an overview and analysis of the constitutionality of state subsidies, see Dan T. Coenen, *Business Subsidies and the Dormant Commerce Clause*, 107 YALE L.J. 965 (1998).

110. See *New England Power Co. v. New Hampshire*, 455 U.S. 331 (1982).

111. See *Indianapolis Power & Light Co. v. Penn. Pub. Utils. Comm'n*, 711 A.2d 1071 (Pa. Commw. Ct. 1998).

112. However, in a market-based electricity system, where state regulatory incentives use sales taxes and similar economic interests, dormant commerce clause problems may emerge. See FRED BOSSELMAN ET AL., *ENERGY, ECONOMICS AND THE ENVIRONMENT: CASES AND MATERIALS* 925 (2000) (citing Steven Ferrey, *Renewable Subsidies in the Age of Deregulation; State-imposed Preferences May Have Come to the Wrong Place at the Wrong Time*, FORTNIGHTLY, Dec. 1997, at 22).

113. See *Clean Air Act Mkts. Group v. Pataki*, 194 F. Supp. 2d 147, 159-62 (N.D. N.Y. 2002), *aff'd*, 338 F.3d 82 (2d Cir. 2003) (affirmed on statutory preemption grounds without addressing dormant clause analysis). "New York's explicit restriction on the transfer of SO<sub>2</sub> allowances to units in Upwind States erects such a barrier

or administrative orders that require consideration of GHG emissions effects (which may occur outside the states borders) in integrated resource planning and rate-making are designed to discriminate against interstate commerce or unduly burden interstate commerce they would not appear to raise dormant commerce clause questions.<sup>114</sup>

The dormant commerce clause, derived from the Commerce Clause and historic federalism imperatives when the nation was founded, is sufficiently developed and detailed to be considered its own doctrine. It could also be viewed, at least at a conceptual level, to be a category of constitutional law that might be called "federalism preemption;" *i.e.*, the Supremacy Clause operates on the dormant commerce clause to invalidate (preempt) state laws that offend the dormant commerce clause. The Supremacy Clause is the essential federalism dictate of the Constitution of 1787.<sup>115</sup> It announces the general rule that federal law is the supreme law of the land.<sup>116</sup> It is the Supremacy Clause which has always provided the rule of decision, now generally located in the preemption doctrine, when state law and federal statutory or regulatory law collide.<sup>117</sup>

As a working rule, the preemption doctrine is straightforward:

Preemption may be either expressed or implied and "is compelled whether Congress' command is explicitly stated in the statute's language or implicitly contained in its structure and purpose." Absent explicit preemptive language, we have recognized at least two types of implied pre-emption: field preemption, where the scheme of federal regulation is "so pervasive as

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against the movement of interstate trade. Accordingly, [it] is a constitutionally invalid protectionist measure." 194 F. Supp. 2d at 161. The District Court also held that even if it were nondiscriminatory, the law would place nevertheless be unconstitutional because it imposes an undue burden on interstate commerce. *Id.*

114. See, *e.g.*, Engel, *supra* note 58.

115. U.S. CONST. art. VI, § I, cl. 2.

116. The Thirteenth, Fourteenth, and Fifteenth Amendments add federal prohibitions on the use of state power and specifically authorize Congress to enact legislation to enforce those prohibitions. By expanding Congress' powers to regulate State activity, these amendments represent a major change in the constitution's federalism balance between federal and state power. However, this power shift relates exclusively to federal regulation of state power over individuals.

117. *McCulloch v. Maryland*, 17 U.S. (4 Wheat.) 316, 426 (1819) (holding that the state of Maryland cannot tax a branch of the second bank of the United States because "[the] great principle is, the constitution and the laws made in pursuance thereof are supreme; that they control the constitution and laws of the respective States, and cannot be controlled by them.").

to make reasonable the inference that Congress left no room for the States to supplement it," and conflict pre-emption, where "compliance with both federal and state regulations is a physical impossibility," or where state law "stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress."<sup>118</sup>

However, as *Gade* itself teaches, application of the basic doctrine may differ, based on the Justices' perception of Congress' objectives, the state law's purpose, and the decision making presumptions that should apply.<sup>119</sup> *Gade*, decided by Justice O'Connor's plurality opinion (joined by Chief Justice Rehnquist, and Justices White and Scalia), held that the state law was barred by conflict preemption. Justice Kennedy, finding express preemption, concurred in part and in the judgment. In contrast, Justices Souter, Blackman, Stevens, and Thomas dissented because the plurality did not apply the rule "that federal pre-emption of state law is only to be found in a clear congressional purpose to supplant exercises of the states' traditional police powers. . . ."<sup>120</sup> A particular Justice's perception may well be influenced by federalism concerns because "[t]he more broadly the power to preempt is construed, the smaller the scope for state authority, and similarly the more broadly statutes are construed as preemptive, the narrower the scope of state authority."<sup>121</sup>

This leads us to the question of whether state and local legislative initiatives to address global warming are valid within our constitutional system. The question can be analyzed at several levels. The first is whether any of the specific state laws are preempted by federal statutes. Clearly, if a state statute conflicts with federal statute, the state statute is preempted. So, for instance, a Massachusetts law (the so-called Burma Law) enacted to support human rights and democracy in Burma by barring state agencies from purchasing goods and services from Burma was unconstitutional because it conflicted with a subsequent federal statute which imposed sanctions on Burma, and authorized the

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118. *Gade v. Nat'l Solid Wastes Mgmt. Ass'n*, 505 U.S. 88, 98 (1992) (O'Connor, J.) (citations omitted).

119. *Id.*

120. *Id.* at 115 (Souter, J., dissenting).

121. Mark Tushnet, *Globalization and Federalism in a Post-Printz World*, 36 TULSA L.J. 11, 13 (2000) (arguing that "[p]reemption law should . . . be coordinated with the . . . constitutional law of federalism, if the nation is to have a coherently unified law of national and state power.").

President to impose further sanctions.<sup>122</sup> The Massachusetts law, more stringent and rigid than Congress' enactment, was "an obstacle to the accomplishment of Congress's [sic] full objectives under the federal Act."<sup>123</sup>

At present there is no federal statute that directly regulates greenhouse gas emissions, so, statutorily, there can be no express preemption. Moreover, the Environmental Protection Agency (EPA) recently announced that it does not have authority under the Clean Air Act to regulate carbon dioxide as a criteria pollutant for which it would be obligated to establish a national ambient air quality standard.<sup>124</sup> Thus, in terms of ambient air quality, it appears that the federal government has abandoned the field to the states. Moreover, even if EPA were to designate carbon dioxide to be a criteria pollutant, and were to promulgate national ambient air quality standards for carbon dioxide, that would not preclude a state from adopting and implementing a more stringent standard for that pollutant.<sup>125</sup>

Although EPA does not appear interested in regulating carbon dioxide as a pollutant from motor vehicle emissions, the Clean Air Act generally prohibits states from setting mobile source emission limitations under the Clean Air Act,<sup>126</sup> except for the California car.<sup>127</sup> The Clean Air Act allows only two varieties of motor vehicle emission limitations, the so-called national car, and the California car.<sup>128</sup> Thus, to the extent that a particular state GHG statute is deemed to regulate motor vehicle emissions in a manner inconsistent with the California car preemption waiver it might conflict with the Clean Air Act's two car mandate. For instance,

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

123. *Id.* at 364-380. Specifically, the court held that the [S]tatute conflicts with federal law . . . by penalizing individuals and conduct that Congress has explicitly exempted or excluded from sanctions . . . [even though] there is no real conflict between the statutes because they share the same goals and because some companies may comply with both sets of restrictions. . . . The state Act is at odds with the President's intended authority to speak for the United States among the World's nations in developing a "comprehensive, multilateral strategy to bring democracy to and improve human rights practices [in] Burma."

*Id.*

124. Control of Emissions from New Highway Vehicles and Engines, Notice of Denial of Petition for Rulemaking, 68 FR 52,922, 52,925-931 (Monday, Sept. 8, 2003).

125. 42 U.S.C. § 7416.

126. 42 U.S.C. § 7543(a).

127. 42 U.S.C. § 7543(b); *see also* Motor Vehicle Mfrs. Ass'n v. New York Dep't of Envtl. Conservation, 79 F.3d 1298 (2d Cir. 1996).

128. *See* 42 U.S.C. § 7543.

California has recently enacted a statute limiting future greenhouse gas emissions, which might be deemed an effort to regulate motor vehicle emissions beyond what EPA currently allows under its approved version of the California car. However, should California petition EPA to approve a new version of the California car, which incorporates reduced carbon dioxide emissions, EPA might be obligated to approve the application, thereby waiving any Clean Air Act preemption.<sup>129</sup>

### Foreign Affairs

We turn now to consider whether state and local laws addressing global warming and greenhouse gases offend the Constitution by intruding on the foreign affairs power of the federal government. Certainly, duly ratified treaties and the federal statutes that implement them are the supreme law of the land. As such, they preempt conflicting state laws.<sup>130</sup>

Nor does the Tenth Amendment provide refuge for a state. For instance, in *Missouri v. Holland*,<sup>131</sup> a Missouri game warden sued the United States to enjoin enforcement of the federal Bird Treaty Act of 1918, which had to be enacted into law to meet the United States promises under the Migratory Bird Treaty of 1918.<sup>132</sup> Missouri argued that the "statute is an unconstitutional interference with the rights reserved to the States under the Tenth Amendment,"<sup>133</sup> namely Missouri's traditional police power to regulate hunting of wild animals in the state. Justice Holmes presented the federalism questions and how to decide it:

[W]hen we are dealing with words that are also a constituent act, like the Constitution . . . we must realize that they have called into life a being the development of which could not have been foreseen completely by the most gifted of its begetters. It was enough for them to realize and hope that they had created an organism; it has taken a century and has cost their successors much sweat and blood to prove that they created a nation. The case before us must be considered in light of our whole ex-

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129. See Rachel L. Chanin, Note, *California's Authority To Regulate Mobile Source Greenhouse Emissions*, 58 N.Y.U. ANN. SURV. AM. L. 699 (2003) (arguing that California is not preempted by either the Clean Air Act or the CAFE statute in implementing its carbon dioxide emission reduction statute, AB 1493).

130. See *Missouri v. Holland*, 252 U.S. 416 (1920); *Hauenstein v. Lynham*, 100 U.S. 483 (1879); *Ware v. Hylton*, 3 U.S. (3 Dall.) 199 (1796).

131. 252 U.S. 416.

132. *Id.*

133. *Id.* at 431.



perience and not merely in that of what was said a hundred years ago. The treaty in question does not contravene any prohibitory words to be found in the Constitution. The only question is whether it is forbidden by some *invisible radiation* from the general terms of the Tenth Amendment. We must consider what that nation has become in deciding what that Amendment has reserved.<sup>134</sup>

Justice Holmes then held that the treaty and statute preempt the state's police power to regulate hunting within the state. As to the Tenth Amendment, the Court dismissed Missouri's claim that it owned these wild, migratory birds (at least while they were in Missouri) or that the Tenth Amendment protected its putative ownership.<sup>135</sup>

Holmes articulated the relationship between national and state interests:

We see nothing in the Constitution that compels the Government to sit by while a food supply is cut off and the protectors of our forests and our crops are destroyed. It is not sufficient to rely on the States. The reliance is in vain, and were it otherwise, the question is whether the United States is forbidden to act. We are of the opinion that the treaty and statute must be upheld.<sup>136</sup>

Thus, the Tenth Amendment provides no federalism limit on the treaty power, even though, "no agreement with a foreign nation can confer power on the Congress, or on any other branch of Government, which is free from the restraints of the Constitution."<sup>137</sup> Presumably, the Court was here referring to protections of individual rights guaranteed by the Constitution.<sup>138</sup> Justice Black

134. *Id.* at 433 (emphasis added).

135. "Wild birds are not in the possession of anyone; and possession is the beginning of ownership. The whole foundation of the State's rights is the presence within their jurisdiction of birds that yesterday had not arrived, tomorrow may be in another state and in a week a thousand miles away." *Id.* at 434.

136. *Id.* at 435.

137. *Reid v. Covert*, 354 U.S. 1, 16 (1957).

138. *Am. Ins. Ass'n v. Garamendi*, 123 S. Ct. 2374, 2388 n.9 (2003).

Generally, then, valid executive agreements are fit to preempt state law, just as treaties are. . . . Subject, that is, to the Constitution's guarantees of individual rights. Even Justice Sutherland's reading of the National Government's "inherent" foreign affairs power . . . contained the caveat that the power, "like every other governmental power, must be exercised in subordination to the applicable provisions of the Constitution."

*Id.* (citations omitted).

later explicitly confirmed Justice Holmes' view that the Tenth Amendment provides no such constraints:<sup>139</sup>

[In *Missouri v. Holland*] the Court carefully noted that the treaty involved was not inconsistent with any specific provision of the Constitution. The Court was concerned with the Tenth Amendment which reserves to the States or the people all power not delegated to the National Government. To the extent that the United States can validly make treaties, the people and the States have delegated their power to the National Government and the Tenth Amendment is no barrier.<sup>140</sup>

Thus, the Tenth Amendment cannot be used generally to limit federal treaty power over states,<sup>141</sup> although it certainly protects state use of police power in the absence of a constitutional prohibition or preemption.

The final question to examine is whether the various state GHG laws and initiatives offend the Foreign Affairs powers of the President or Congress under the Constitution because they reflect a state response to an international problem that offends the federalism balance of powers that the Framers' built into the Constitution. Although the Court has had the opportunity to answer this question, it has declined to do so. Instead, it appears to be developing a doctrine of foreign affairs preemption, although the specifics of the doctrine, the boundaries of its coverage, and even its existence are uncertain.<sup>142</sup> This issue has not been directly ad-

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139. *Covert*, 354 U.S. 1. Picking up on the new federalism approach of the current Supreme Court, one commentator has argued for abandoning the *Missouri v. Holland* approach to treaties and federalism in favor of applying the same federalism constraints Congress is limited by to treaties. See Curtis A. Bradley, *Treaty Power and American Federalism*, 97 MICH. L. REV. 390 (1998). This argument has received a rocky reception. See, e.g., Edward T. Swaine, *Does Federalism Constrain the Treaty Power?*, 103 COLUM. L. REV. 403 (2003); David M. Golove, *Treaty Making and the Nation: The Historical Foundations of the Nationalist Conception of the Treaty Power*, 98 MICH. L. REV. 1075 (2000).

140. *Covert*, 354 U.S. at 18.

141. However, it is an open question whether the Tenth Amendment might bar Congress from choosing to implement a national treaty obligation by commanding states to promulgate and enforce statutes and regulations, or otherwise "commandeering" branched of state government. See Janet R. Carter, Note, *Commandeering Under the Treaty Power*, 76 N.Y.U. L. REV. 598 (2001). However, this concern has not arisen in the past because Congress historically has "given or left to the States a substantial part in the implementation of national foreign policy." LOUIS HENKIN, *FOREIGN AFFAIRS AND THE CONSTITUTION* 245 (1972).

142. See *Am. Ins. Ass'n v. Garamendi*, 123 S. Ct. 2374, 2389, 2400 (2003). Compare Justice Souter for the majority, "[i]t is a fair question whether respect for the executive foreign relations power requires a categorical choice between the contrast-

addressed by the Supreme Court in the few foreign affairs federalism cases it has considered. Most foreign affairs cases considered the issues through the lens of separation of powers among the three branches of the federal government. Even then, the Court has tended to not resolve the constitutional issue by deeming it to be a political question, better resolved by Congress and the President.<sup>143</sup>

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ing theories of field and conflict preemption . . . but the question requires no answer here[.]” with Justice Ginsburg, dissenting,

[W]e would reserve foreign affairs preemption for circumstances where the President, acting under statutory or constitutional authority, has spoken clearly to the issue at hand. “[T]he Framers did not make the judiciary the overseer of our government.” And judges should not be the expositors of the Nation’s foreign policy, which is the role they play by acting when the President himself has not taken a clear stand. As I see it, courts step out of their proper role when they rely on no legislative or even executive text, but only on inference and implication, to preempt state laws on foreign affairs grounds.

*Id.* at 2389, 2400 (citations omitted). For more detailed analysis of the confusion in this area, see *The Supreme Court, 2002 Term: Leading Cases*, 117 HARV. L. REV. 226, 235 (2003) (arguing that the dormant foreign affairs preemption concept is incoherent and deserves “burial”); Edward T. Swaine, *Negotiating Federalism: State Bargaining and the Dormant Treaty Power*, 49 DUKE L.J. 1127 (2000); Harold G. Maier, *Preemption of State Law: A Recommended Analysis*, 83 AM. J. INT’L L. 832 (1989).

143. The Supreme Court has a long history of ruling that matters related to foreign affairs are nonjusticiable political questions, e.g., *Oetjen v. Central Leather Co.*, 246 U.S. 297 (1918), although the Court has ruled on the merits with respect to whether the President has the power to enter into executive agreements instead of treaties. See also *Dames & Moore v. Regan*, 453 U.S. 654 (1981); and as to whether the subject matter of a treaty is constitutional, see *Missouri v. Holland*, 252 U.S. 416 (1920). On the other hand, the Supreme Court has held to be political questions disputes about: a) when a “war” begins or ends, a power vested exclusively in Congress in *Commercial Trust Co. v. Miller*, 262 U.S. 51, 57 (1923); b) recognition of foreign governments or Indian tribes in *United States v. Blemont*, 301 U.S. 324 (1937), and *United States v. Sandoval*, 231 U.S. 28, 45-46 (1913); and c) the validity, ratification, and interpretation of treaties in *Goldwater v. Carter*, 444 U.S. 996 (1979).

Although the Supreme Court has not addressed the issue, federal courts have applied the reasoning behind these rulings to find that disputes over the President’s exercise of war powers are political questions. See *Holtzman v. Schlesinger*, 484 F.2d 1307, 1309 (2d Cir. 1973), *cert. denied*, 416 U.S. 936 (1974) (challenge to Vietnam War); *Crockett v. Reagan*, 720 F.2d 1355 (D.C. Cir. 1983), *cert. denied*, 467 U.S. 1251 (1984) (challenge to President’s use of the military in El Salvador); *Ange v. Bush*, 752 F. Supp. 509 (D.D.C. 1990) (challenge to the first Iraq war). The application of the political question doctrine has been the subject of vigorous scholarly debate. See, e.g., Martin Redish, *Judicial Review and the Political Question*, 79 NW. U.L. REV. 1031 (1985); Louis Henkin, *Vietnam in the Courts of the United States: Political Questions*, 63 AM. J. INT’L L. 284 (1969).

## Conclusion

Generally, from a federalism perspective, it is hard to imagine any argument that state and local GHG initiatives are constitutionally offensive. They do not conflict with any federal statutes or regulations. They do not conflict with any treaty or executive agreement, they do not impose any obligation, limitation, or condition on an foreign government, nor do they interfere with federal settlement of disputes and claims against foreign countries or businesses. Thus, no matter what theory of preemption is operative, be it traditional preemption,<sup>144</sup> dormant foreign affairs preemption,<sup>145</sup> or the recently proposed (and very attractive) approach of dormant Treaty Clause preemption,<sup>146</sup> there is simply no federalism concern here. Instead, each state GHG legal initiative is directed solely at local activities that result in the mitigation of GHG emissions. The state and local activities represent exactly the kind of activities that states should be encouraged to institute, when the federal government is not active.<sup>147</sup> Moreover, from the federal government's perspective, these state and local policies are not only objectionable, they are essential:

State-level policies to control greenhouse gas emissions are essential for mitigating the economic, health and environmental treats posed be global climate change. States play a crucial role

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144. See *Crosby v. Nat'l Foreign Trade Council*, 530 U.S. 363 (2000).

145. See *Am. Ins. Ass'n v. Garamendi*, 135 S. Ct. 2374 (2003).

146. Swaine, *supra* note 142, at 1128 (arguing that judicial application of preemption in the field of foreign affairs should be based exclusively on the Treaty Clause).

147. See Daniel Halberstam, *The Foreign Affairs of Federal Systems: A National Perspective on the Benefit of State Participation*, 46 VILL. L. REV. 1015, 1028 (2001). Mr. Halberstam argues that:

[A]lthough tensions between federal and state policies do emerge periodically, state activities often benefit the Nation. State officials are frequently in a better position to promote trade and investment opportunities at home. Relative to federal actors, state officials may enjoy an informational advantage relevant to the crafting or carrying out international agreements. State officials may assist national policymakers by providing broad political support that differs from the support garnered by organized economic interests. And independent state action may induce federal officials to take up international issues that would otherwise not make it onto their political agenda. Indeed, the federal government has frequently embraced the state and local concerns as its own and, especially in the area of trade and investment, has regularly included state and local governmental representative in the formulation of federal foreign policy itself.

*Id.* at 1028.

in helping the US as a whole to meet the national pledge to reduce greenhouse gas emissions.<sup>148</sup>

The states are policy development laboratories. They are innovators, and they are taking direct political responsibility for their innovations. According to Washington State Governor Gary Locke, "The states are taking action for one simple reason: because the federal government is not."<sup>149</sup> State initiatives represent local political actions designed, in part, to push global warming onto the national agenda,<sup>150</sup> even though it is universally recognized that uncoordinated state and local efforts can only be a weak stand-in for federal leadership and action in the realm of climate change.

Ironically, the federal government responded to the "withering" international criticism of its failure to act on global warming, by declaring that the multitude of state and local initiatives demonstrate that "there is a broad effort going on in the United States on many levels to address global climate change."<sup>151</sup> In the Administration's chief negotiator's view, the states were "laboratories where new and creative ideas and methods can be applied and shared with others and inform federal policy, a truly bottom-

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148. ENVTL. PROT. AGENCY, STATES GUIDANCE DOCUMENT: POLICY PLANNING TO REDUCE GREENHOUSE GAS EMISSIONS 1-1 (2d ed., 1998), available at <http://yosemite.epa.gov/oar/globalwarming.nsf/content/ResourceCenterPublicationsReferenceStateGuidanceDocument.html> (last visited Jan. 10, 2004).

149. Andrew C. Revkin & Jennifer 8. [sic] Lee, *White House Attacked for Letting States Lead on Climate Policy*, N.Y. TIMES, Dec. 11, 2003, at A32 [hereinafter *Climate Policy*].

150. *Id.* A senior aid to New York Gov. George E. Pataki stated, "They [the Bush Administration] have not yet taken climate change on as a real issue and developed policies. We are going to keep pushing them." *Id.*

151. *Climate Policy*, *supra* note 149 (quoting Dr. Harlan L. Watson, the Bush Administration's chief negotiator at the Milan Conference of the Parties to the United Nations Framework Convention on Climate Change, held in December 2003). The EPA's global warming website takes a similar approach. On its website, EPA touts a range of state activities as important policy initiatives: "Action at the state level is a key component of the US response to the potential impacts posed by climate change." See <http://yosemite.epa.gov/oar/globalwarming.nsf/content/ActionsState.html> (last visited Jan. 10, 2004). The site reviews twenty-eight state plans, many case studies, and legislative efforts across the nation. As to local initiatives, EPA's position is that:

Cities and towns across the U.S. are on the front lines of climate change and feel the effects of changes such as in precipitation, temperature, sea-level rise, and air quality. Cities and towns are also in the position to take a variety of energy efficiency and renewable energy actions that can have multiple benefits including saving money, creating jobs, promoting sustainable growth, and reducing criteria pollutants.

See <http://yosemite.epa.gov/oar/globalwarming.nsf/content/ActionsLocal.html> (last visited Jan. 10, 2004).

up approach to addressing climate change,” which both federal officials and industry groups believe “is in the best federalist tradition.”<sup>152</sup> Although some people criticize the Administration for hiding behind state actions to mollify international critics of federal hostility towards global warming policy, at least the Administration’s federalism approach supports existing, and encourages future, state and local innovations. The Administration does not view the state efforts as contrary to the national interest, but, indeed, to be in the nation’s interest. So, from all constitutional perspectives, it is constitutional for states to react to risks of global warming, or to think globally but act locally.

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152. *Climate Policy*, *supra* note 149.