

Federal Cap-and-trade: A Seamless Web in a Global Economy

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As is often the case with environmental law, the rapidity with which change can occur within existing regulatory schemes, in legislative policy, or as a result of public opinion, make tantamount to its learning the disentangling of threads from a rich and complex quilt -- all in real-time. Over the course of four short months dating back to the inauguration of President Obama, something of a revolution has occurred with respect to global warming law and policy – and we were fortunate enough to have learned about it *as it happened*. And although the fight over global warming has long since been waged, I count myself lucky to have been a newcomer to the environmental field at an exciting time in which current events promise to change things forever.

The elusive nature of global warming law and policy illustrates but one example in which citizen-led efforts have wrought significant environmental changes in the shadow of large segments of American industry. As a result, coal burning plants and other energy providers, car manufacturers, and agricultural producers, to name a few, will all face challenges to remain relevant in a new, more environmentally-friendly world economy. This paper explores the debate surrounding federal “cap-and-trade” initiatives from a global perspective. First, I will review recent developments that will lead to the eventual regulation of carbon by the federal government. Next, I will discuss federal proposals seeking to address the problem of global warming, including cap-and-trade and straight carbon taxation. Ultimately, I will attempt to contextualize the relative strength of these cap-and-trade proposals in ways that reveal trends in global warming law and policy.

I. Carbon Dioxide Poses a Significant threat to Human Health

At the outset, any examination of cap-and-trade first requires a foundation in law. Even the most vapid environmentalists could, if only taken with preaching in platitudes about the health

dangers of air pollution and global warming, never hope to change the complexion of the environment without a basis in law. Without legislative or regulatory action, moreover, and despite near unanimous accord in the scientific community over its environmentally detrimental effects, global warming will undoubtedly worsen.¹ To assume otherwise, perhaps, would be analogous to believing that the unquestionably abhorrent “separate but equal” social policies of the early half of the 20th Century would have failed *eventually*, despite the eventual passage of the Civil Rights Act of 1964.

In order address the perceived harms caused by global warming, one must first define, then legally identify what qualifies as “air pollution” and “global warming,” if any efforts to eliminate that which contributes to its proliferation are to be successful.²

The Environmental Protection Agency (hereafter “EPA”) describes global warming as follows:

*Global warming is an average increase in the temperature of the atmosphere near the Earth’s surface and in the troposphere, which can contribute to changes in global climate patterns. Global warming can occur from a variety of causes, both natural and human induced. In common usage, ‘global warming’ often refers to the warming that can occur as a result of increased emissions of greenhouse gases from human activities.*³

Up until the Supreme Court’s decision in *Massachusetts v. EPA*,⁴ no regulatory body under the Bush Administration had claimed responsibility for the regulation of greenhouse gas emissions, an apparent requirement under the Clean Air Act (hereafter “CAA”).⁵ Leading up to what was

¹ See IPCC, 2007: Summary for Policymakers. In: Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M.Tignor and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA. Available at http://ipcc-wg1.ucar.edu/wg1/Report/AR4WG1_Print_SPM.pdf. (last updated 2/25/2009).

² *Id.*

³ Grad, *Treatise on Environmental Law* 2008, §1A.02[2][a] at 1A-4, LexisNexis (pub. 323, release No. 63)(2008)(citing EPA, Climate Change, Basic Information, Available at <http://epa.gov/climatechange/basicinfo.html>).

⁴ *Massachusetts v. EPA*, 127 S.Ct. 1438 (2007).

⁵ See Note 3, supra at 1A-6. (“[T]he Court [in *Massachusetts v. EPA*] . . . concluded that [the Clean Air Act] authorizes EPA to regulate greenhouse gas emissions from new motor vehicles if it forms a “judgment” that the emissions contribute to climate change . . . [and] directs EPA to prescribe standards applicable to e emission of any air pollutant . . . which in [its] judgment causes or contributes to dangerous air pollution.”)

essentially a challenge to its jurisdiction, “[the] EPA reasoned that it [had] lacked the power to impose emission limitations on greenhouse gases[,] and that greenhouse gases [were not] ‘air pollutants’ within the meaning of the Act.”⁶ After *Massachusetts v. EPA*, the EPA could only “avoid taking further action to regulate greenhouse gases . . . if it determined that [such gases did not] contribute to climate change.”⁷ On Friday, April 17, 2009, the EPA, now under the Obama administration, made its determination.

In what marks the virtual beginning of the federal discourse surrounding greenhouse gas regulation in the United States,⁸ the EPA declared that “carbon dioxide and other greenhouse gases are a significant threat to human health[,] and thus will be listed as pollutants under the Clean Air Act,” a move which “could allow EPA to regulate [them].”⁹ Having made such a determination, the EPA must now decide whether it chooses to regulate, or “use the action to prod Congress to pass regulations around a system . . . [whereby] the [harmful gases are] gradually lowered.”¹⁰ What is clear is that the EPA *must* act, even if Congress does not. Regardless of who decides to act first, however, “[m]ost observers expect that it [c]ould take months, if not years to actually produce rules that could control the 7.3 billion metric tons of CO₂ the U.S. produces.”¹¹

The reality, at least according to some, is that “no one actually wants the EPA to regulate greenhouse gases [including EPA Administrator Lisa Jackson and President Barack Obama], who[] have repeatedly stated that they would much prefer [that] *Congress* set limits directly, most likely

⁶ 42 U.S.C. § 7602(g)(defining “air pollution” as “any air pollution agent or combination of such agents, including any physical, chemical . . . substance or matter which is emitted into or otherwise enters the ambient air.”)

⁷ See Note 3, *supra* at 1A-7.

⁸ State and Regional efforts are already well under way. See, e.g., The Regional Greenhouse Gas Initiative, <http://www.rggi.org/home>.

⁹ MSNBC, *U.S. Declares Warming Gases are Health Threat*. Available at <http://www.msnbc.msn.com/id/30264214/> (published Friday, April 17, 2009).

¹⁰ *Id.*

¹¹ Time, *EPA’s CO₂ Finding: Putting a Gun to Congress’s Head*. Available at <http://www.time.com/time/printout/0,8816,1892368,00.htm> (published Saturday, April 18, 2009).

through a cap-and-trade program.”¹² Indeed, perhaps because of the amount of time it would take the EPA to develop a long-term regulatory plan, or, as a function of the higher costs critically associated with such regulation, federal cap-and-trade legislation may be the best way of curtailing the flow of dangerous greenhouse gases on a federal level. On both a national and international level, moreover, I submit that congress is the more appropriate authority to act for reasons more fully explained below.

II. Cap-and-Trade.

In some form, one might agree that cap-and-trade provides the best answer to this newly recognized environmental problem under the law. But how would such a plan work? The *Sightline Institute*, a non-profit think-tank based in Seattle, WA, recently published a report entitled, “*Cap and Trade 101*,”¹³ which provides an excellent overview of the program and its benefits.

“A cap-and-trade system, when done right, enforces an economy-wide limit on greenhouse gas emissions . . . , sets realistic goals and commonsense rules for reducing [them] over time, and harnesses the creativity and dynamism of the market to achieve these goals.”¹⁴ According to the *Sightline report*, which recommends a particular cap-and-trade design, the “right” climate policy would include the following four principles:

[1] Cap and trade should [be **comprehensive** and] cover *all* measurable emissions of greenhouse gases to ensure an efficient, economy-wide transition away from carbon-based fuels . . . ; [2] [To this end, it should] operate **upstream**[:] [that is, it] should operate as high as possible in the supply chain . . . [or], as close as is convenient to the point at which fossil fuels enter the economy of the state, province, or nation in question . . . ; [3] [G]reenhouse gas [permits] should [be **auctioned**], not “grandfathered” . . . to historic polluters . . . since [a]uctioning prevents windfall profits for energy companies, allows the proceeds to serve the public interest, and prevents market manipulation and ‘gaming,’ [and finally]; [4] [Should contain] **built in protections** . . . [whereby] revenue from auctioning cap-and-trade permits should . . . compensate families for the burden of expensive energy.”¹⁵

¹² *Id.*

¹³ Alan Durning, Anna Fahey, Eric de Place & Clark Williams-Derry, *Cap and Trade 101, A Climate Policy Primer*, Sightline Institute, 2009 Edition. Available at http://www.sightline.org/research/energy/res_pubs/cap-and-trade-101/Cap-Trade_online.pdf (published January, 2009).

¹⁴ *Id.* at 4, 5.

¹⁵ *Id.* (emphasis added).

Conceptually, the essence of cap-and-trade is quite simple. “Caps” are literally “limits on the quantity of greenhouse gases [that] our economy [is allowed to] emit each year.”¹⁶ The idea is that “over time . . . the cap gets tighter,” until we reach a designated limit that presumably achieves our goal: “a clean energy economy.”¹⁷ “‘Trade’ means that . . . companies [will] swap [legal commodities] among themselves [that will allow them] to emit greenhouse gases The point of such a trading system is to put a price on pollution that will travel throughout the economy” and incentivize “millions of diverse, dispersed, innovative, self-interested people – to [achieve] our climate goals.”¹⁸ Thus, once we have successfully measured the amount of greenhouse-gas emissions in the atmosphere, lawmakers will need to set short- and long-term cap limits that will lead to an overall reduction in the amount pollution over time.

According to *Sightline*, after auctioning the desired amount of permits in decreasing quantities over time, all that remains in order to effectuate an efficient program is enforcement. Recognizing that most cap-and-trade proposals vary on how effective and fair they can function, *Sightline* further recommends that “[a]ffected businesses [should] file periodic reports verifying that they hold enough permits to cover their emissions.”¹⁹ In addition, *Sightline* contemplates that “[a]uthorities will audit some reports to deter misrepresentations,” and that perhaps the very same authority will oversee the market-based system “much as the Securities and Exchange Commission oversees Wall Street.”²⁰ Consequently, the *Sightline* report expounds upon its cap-and-trade design and its vision for the future in great length. Not all agree, however, that cap-and-trade proposals, in any form, are the best way to reduce greenhouse gas emissions.

III. Cap-and-trade Alternatives.

¹⁶ *Id.* at 6

¹⁷ *Id.* at 6, 7

¹⁸ *Id.* at 7

¹⁹ *Id.* at 7.

²⁰ *Id.*

For some, the sheer complexity of any cap-and-trade program makes them difficult to understand and follow, in part because such programs may require detailed emissions registries or “complicated system[s] of accounting.”²¹ Also, “because trading works in some sectors and not others, there are complaints about the fairness of regulating certain sectors such as power plants when greenhouse emissions come from the entire economy.”²² Finally, perhaps the loudest criticisms of a federal cap-and-trade program come from those who believe that a straight tax on carbon emissions presents a more expedient alternative.

For the most part, groups advocating for nationwide carbon-tax solutions laud their relative straightforward simplicity: “[c]ongress just sets the tax, and the IRS collects it.”²³ “The cost of the carbon component of any fossil fuel--set by the tax rate--is known and predictable, so users can plan accordingly, whereas tradable allowances have fluctuating prices.”²⁴ By contrast, opponents of cap-and-trade argue that “[such proposals] add [needless] layers of complexity.”²⁵

In a recent interview with the *Wall Street Journal*, however, Fred Krupp, author and President of the New York-based Environmental Defense Fund, responded to these objections. “Tax proposals don’t measure up [to binding emissions limits that could be achieved through the imposition of a cap], [because] they [would fail to] spur the innovations and the emissions reductions we need. Moreover, if a [carbon] tax proposal were to be taken seriously, the number of exemptions would be huge; consider our 17,000 page IRS code.”²⁶

IV. Global Perspectives.

²¹ PBS Online, *Emissions Trading Ins and Outs*. Available at http://www.pbs.org/newshour/indepth_coverage/science/globalwarming/emissions.html. (published June 5, 2006).

²² *Id.*

²³ Janet Milne, *The Case for Carbon Taxes: Simple is Better*, Bulletin of the Atomic Scientists, Web Edition. Available at <http://www.thebulletin.org/web-edition/roundtables/carbon-tax-vs-cap-and-trade>. (published September 5, 2008).

²⁴ *Id.*

²⁵ *Id.*

²⁶ Wall Street Journal, *EDF’s Fred Krupp: On Cap-and-Trade, Offsets, and Indiana Grandmothers*. Available at <http://blogs.wsj.com/environmentalcapital/2009/03/19/edfs-fred-krupp-on-cap-and-trade-offsets-and-indiana-grandmothers/> (published March 19, 2009 at 1:43 pm).

One commentator from the *Washington Post*, while advocating for a straight-carbon tax, concedes that cap-and-trade regimes have advantages over carbon-tax-based solutions since they have the potential to “afford regulators the ability to set a limit on emissions and to *integrate* with other countries.”²⁷ Expanding further on cap-and-trade’s global integration capabilities, two economists from the Environmental Defense Fund argue that “[a] cap-and-trade system allows for the creation of a global carbon market. Such a market would provide the mechanisms and flexibility necessary to achieve the environmental goals at the lowest cost and the incentives for other countries to join. A tax does neither, while requiring much more harmonization across countries.”²⁸ If the United States were ever to engage in *global* efforts aimed at curbing greenhouse gas emissions, there exists comparably little evidence that the adoption of a system of straight-carbon taxation would provide a better solution. By contrast, the apparent feasibility of world-wide integration using cap-and-trade could form the catalyst to the eventual re-adoption of Kyoto (or its progeny) by the United States.

In 1997, the international community adopted the Kyoto Protocol, which set “mandatory, legally-binding limits on the emission of six separate greenhouse gases -- including carbon dioxide, methane and nitrous oxide -- by signatory nations.”²⁹ “In 2001, however, President George Bush withdrew the U.S. -- the world's largest greenhouse gas polluter, responsible for approximately 25% of global emissions -- from the Protocol . . . , [d]escribing the treaty as ‘fatally flawed’ [because of the] profoundly detrimental effect [it would have] on the U.S. economy.”³⁰ The subsequent

²⁷ Washington Post, *Climate Change Solutions - Sen. Boxer is open to everything -- except what might work best*. Available at <http://www.washingtonpost.com/wp-dyn/content/article/2009/02/15/AR2009021501425.html> (published Monday, February 16, 2009)(emphasis added).

²⁸ Gernot Wagner & Nathaniel Keohane, *Carbon Tax vs. Cap and Trade*, Bulletin of the Atomic Scientists, Web Edition. Available at <http://www.thebulletin.org/web-edition/roundtables/carbon-tax-vs-cap-and-trade>. (published November 7, 2008).

²⁹ CNN, *Kyoto: The Next Generation*. Available at <http://edition.cnn.com/2007/TECH/science/05/08/kyoto.protocol/> (posted May 9, 2007 at 4:35 GMT).

³⁰ *Id.*

withdrawal of the U.S. from Kyoto “was a huge blow.”³¹ Although it has been suggested that Kyoto was meant only to be a “first step” in the fight against global warming, it has been a colossal failure nonetheless. “According to the U.N., the world's major industrialized nations are now severely off-target, with experts predicting a 10 percent rise in 1990 greenhouse gas emissions by 2010 rather than the hoped for 5.2 percent reduction.”³² Despite failing to achieve its “first commitment” goals, however, Kyoto nonetheless stands as the “only viable, legally-binding pan-national vehicle for confronting the causes of global warming.”³³ Thus, any program that allows for the option of integrating a national solution into a worldwide framework like Kyoto, would give cap-and-trade, as well as the fight against global warming itself a significant boost in the future. Incidentally, Kyoto’s “second commitment period” is set to begin in 2012.

V. How to Proceed Under Cap-and-trade without Offending the Constitution.

By expanding the scope of our inquiry to include the overall *global* impact of greenhouse gas emissions, it is clear that any effort by federal regulators to act *without* the assistance of Congress would be somewhat shortsighted. “Carbon is so global, so embedded in every aspect of modern life that it needs to be managed by the popularly elected governmental body meant to represent us all: [c]ongress.”³⁴ This sentiment, along with a possible long-term objective of entering into bi-lateral international agreements that limit global carbon emissions, might explain the President’s reticence to promulgate regulations prematurely without due congressional deference. Further, while no one now questions whether the EPA is charged with the responsibility of regulating greenhouse gases under CAA, efforts to integrate internationally might later be compromised politically if congress remains silent.

³¹ *Id.*

³² *Id.*

³³ *Id.*

³⁴ See Note 11, *supra*.

In a recent article questioning the ability of the executive to unilaterally broker international agreements, for example, the authors argued that such agreements would not enjoy the force of law.³⁵ “The Constitution grants the president the authority to make treaties provided they are approved by two-thirds of the Senate.”³⁶ Also, “[a]s Justice Robert Jackson explained . . . [,] when Congress has passed a law supporting the president’s action, the executive’s authority is at its peak. When Congress has legislated about a policy and rejected the president’s plan . . . the executive’s authority is at its ‘lowest ebb.’ And when Congress is silent on an issue, the president’s authority is somewhere in between.”³⁷ Ultimately, the authors argue that “a congressional resolution stating that the president lacks authority to bind the nation may well invalidate any agreement as a matter of international law.”³⁸ What this means is that, in evaluating whether the EPA has the power to bind the nation to an *international* agreement on global warming such as the Kyoto Protocol, for example, “[c]ourt[s] would begin by looking at what Congress has said about the matter.”³⁹ Until now, Congress has been silent as to how it intends to respond to the EPA’s announcement regarding air pollution, let alone its position regarding international efforts to combat global warming.

V. Conclusion.

Indeed, President Obama’s endorsement of cap-and-trade has already reached the 2010 federal budget plan. Under this plan, “the government would auction off all emission credits, generating as much as \$650 billion in cumulative government revenue between 2012 and 2020

³⁵ See Justin Florence & Matthew Gerke, *Pen Him In: Congress Can Stop Bush’s Efforts to Reach Agreement with Iraq*, Georgetown University Legal Times, Vol. XXXI, No. 5 (published the week of February 4, 2008).

³⁶ *Id.* at 1.

³⁷ *Id.* at 1, 2. (quoting *Youngstown Sheet & Tube Co. v. Sawyer*, 343 U.S. 579, 635-638 (U.S.1952)).

³⁸ *Id.* at 2.

³⁹ *Id.*

The government then [plans] to allocate \$65 billion from the auction revenue for emission credits toward middle-income tax cuts, as well as \$15 billion in funding for clean air technologies.”⁴⁰

Arguably, if he were to enter into future international accords regarding cap-and-trade initiatives, the President would not be acting unilaterally since the EPA can regulate pursuant to congressional approval under CAA and *Massachusetts v. EPA*. That is, it would be difficult indeed for congress to later question the constitutionality of such action.⁴¹ Nonetheless, if we are to succeed in curbing the effects of noxious greenhouse gases worldwide, not only will the country need the *right* plan, but the President should seek political support from congress in order to proceed without constitutional compunction.

⁴⁰ Thomas Industrial Market Trends, *Carbon Tax vs. Cap and Trade*. Available at <http://news.thomasnet.com/IMT/archives/2009/03/carbon-tax-versus-cap-and-trade-system-debate-heats-up.html> (published March 17, 2009).

⁴¹ See Note 37, *supra*.