

HOT SPOTS IN THE LEGISLATIVE CLIMATE CHANGE PROPOSALS

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Victor Flatt's "Legislative Temperature" on climate change provides a useful typology of the proposals now under consideration in the U.S. Congress.¹ Professor Flatt ultimately leaves it to us to decide which proposal is "best." But by tacit consensus, our legislators have already decided one element of the "best" legislation: it will include some version of market-based regulation ("MBR"), in the form of cap-and-trade programs or even (gasp!) taxes.² As Professor Flatt suggests, this development could hardly have been predicted from previous pollution control legislation, which generally adopted various kinds of command-and-control regulation.³

What happened? Professor Flatt attributes the congressional change of heart to the apparent success of the one notable exception to command-and-control regulation; that was the effort to reduce acid rain through a cap-and-trade regime for sulfur dioxide (SO₂) emissions under the Clean Air Act Amendments of 1990.⁴ But Congress instituted the acid rain MBR only after a long and increasingly expensive slog through command-and-control regulation. Indeed, cap-and-trade was to act as a kind of relief from the growing costs of pollution abatement through command-and-control methods.⁵ This is a typical progression of legislative form; in other areas as well, like controlling overfishing, resource economists have noted that sophisticated MBRs only arrive after more cumbersome regulatory regimes have shown their limitations.⁶

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¹ Victor B. Flatt, *Taking the Legislative Temperature: Which Federal Climate Change Legislative Proposal is "Best"?*, 102 NW. U. L. REV. COLLOQUY 123 (2007), <http://www.law.northwestern.edu/lawreview/colloquy/2007/32/> (link).

² See *id.* at 135 (observing that the bills under consideration all include market-based regulation).

³ See *id.* at 137.

⁴ 42 U.S.C. § 7651c-o (2000).

⁵ See Bruce A. Ackerman & Richard B. Stewart, *Reforming Environmental Law*, 37 STAN. L. REV. 1333, 1335-40 (1985) (citing high cost of command-and-control air pollution regulation).

⁶ See, e.g., Shi-Ling Hsu, *Fairness Versus Efficiency in Environmental Law*, 31 ECOLOGY L.Q. 303, 375-76 (2004) (noting that individual fishing quota regimes arrived after failure of command-and-control gear restrictions to prevent overcapitalization; noting also that gear restrictions were easier to establish because more egalitarian).

So, once again, why does Congress prefer MBRs for this issue of greenhouse gas control, without experimenting with other kinds of regulation first? Professor Flatt is undoubtedly right that the early introduction of MBRs to address this new issue reflects a dose of environmental learning—especially learning about the cost-saving capacity of MBRs like cap-and-trade programs. Indeed, the word on the street has been that the U.S. business community would not accept greenhouse gas controls in the absence of cap-and-trade.⁷

But a few other factors may be at work as well, particularly the characteristics of the chief global warming pollutant, carbon dioxide (CO₂). As Professor Flatt notes, CO₂ effectively takes the gas out of many of the major objections to MBRs.⁸ The naggers (of whom I have been one) have always complained about hotspots in cap-and-trade regimes, and about the inappropriateness of trading complex and non-fungible resources like wetlands and habitat.⁹ But CO₂ floats to the upper atmosphere and mixes around, no matter who produces it or where it is produced, creating no hotspots or any other kind of nonfungibility. It persists in the atmosphere, too, so it does not even matter *when* it is produced. Any batch of CO₂ can be traded for any other, from any time, from or to any place. Besides that, on the moral front, it is hard to make devils out of CO₂ producers. The stuff is not poison, after all, and it does not give anyone heart attacks or cancer, like the other big air pollutants. Our current climate dilemma feels more like the situation that occurs when too many people in a room make the whole place too hot. Yes, it is awful, but whose fault is that? So why not allow trading, if trading helps cool the place off?

But the current legislative proposals have another and even bigger surprise for careful observers. The surprise is not just that these proposals showcase MBRs; it is that they plan to make emitters *pay*, right off the bat. Thomas Merrill, taking a leaf from Gary Libecap, observes that market-based regimes may make a lot of sense overall, but that they usually are derailed politically unless the potential losers get paid off.¹⁰ That is to say, distributional concerns—who wins and who loses—too often trump efficiency in the sense of the greatest good for the greatest number. What this

⁷ See Alan Murray, *Why Key Executives are Warming to Legislation on Climate Change*, WALL ST. J., Feb. 7, 2007, at A1 (describing shift in business community to accept global warming legislation, provided it includes cap-and-trade program).

⁸ See Flatt, *supra* note 1, at 141.

⁹ See, e.g., James Salzman & J.B. Ruhl, *Currencies and the Commodification of Environmental Law*, 53 STAN. L. REV. 607, 662–63 (2000) (noting fungibility problem in wetlands trades); Carol M. Rose, *Expanding the Choices for the Global Commons: Comparing Newfangled Tradable Allowance Schemes to Old-Fashioned Common Property Regimes*, 10 DUKE ENVTL. LAW & POL'Y F. 45, 60–61 (1999) (noting problems in trading some environmental resources).

¹⁰ See Thomas W. Merrill, *Explaining Market Mechanisms*, 2000 U. ILL. L. REV. 275, 296–97 (describing Gary Libecap's view that more efficient management regimes still require payoffs to those who did well in old system).

has meant for U.S. environmental policy is (1) a paltry number of MBRs, and (2) those MBRs taking the form of cap-and-trade rather than tax, with (3) the old emitters getting a free pass, more or less, through a gracious helping of grandfathered free emission rights.¹¹

That is why the new climate proposals are such a surprise. Not only do their proponents call for market-oriented controls right from the start, but some of them are talking about cap-and-trade rights being allocated by auction instead of grandfathering, and at least one, Representative John Dingell (D., Mich.), has floated the idea of a (gasp again!) tax instead of cap-and-trade. Both auctions and taxes would have the unprecedented effect of putting money in the public treasury instead of the old emitters' pockets, and there are plenty of ideas about how to spend it.¹² Moreover, the greenhouse gas proposals have revived a mini-debate about the relative merits of emission taxes as opposed to cap-and-trade.¹³ Economists on the whole like taxes better than cap-and-trade, at least for greenhouse gases, chiefly because they think taxes would be less complicated administratively and because taxes could avoid the price volatility that might accompany cap-and-trade.¹⁴

But no one cared all that much about economists' preferences in the past; why should they matter now?¹⁵ A cynical possibility is that Representative Dingell now proposes a carbon tax while continuing to believe, as he has said in the past, that a greenhouse gas tax would be so unpopular that the American public would never tolerate it.¹⁶ If that is the case, then proposing a tax is just a ploy to make us forget about the whole thing and go back to driving around in the Detroit cars so dear to Representative Dingell's heart.¹⁷ This ruse would be Machiavellian, but it might be too sim-

¹¹ *Id.* at 282–85.

¹² *See, e.g., Cost of Controlling Carbon Emissions: Hearing Before the H. Comm. on the Budget*, 110th Cong. 11–12 (Nov. 1, 2007) (statement of Peter R. Orszag, Director, Congressional Budget Office) (suggesting that proceeds from government sale of allowances could be used to alleviate economic dislocations from higher costs of emissions, or to reduce the deficit, or to lower corporate taxes, or to make lump-sum payments to households) [hereinafter *Cost of Controlling Carbon Emissions*].

¹³ *See* Amena H. Saiyid, *Congressional Budget Office Says Carbon Tax Preferable to Cap-and-Trade Regime*, [2007] Daily Env't Rpt. (BNA) No. 212 (Nov. 2), at A-2 (describing debate between several members of the Congressional Budget Office and the Natural Resources Defense Council's David Doniger over carbon tax versus cap-and-trade).

¹⁴ *Id.*; *see also Cost of Controlling Carbon Emissions*, *supra* note 12, at 4–5 (describing these and other advantages of tax over cap-and-trade); Dean Scott, *Congressional Economist Says Carbon Tax More Efficient than Cap-and-Trade Effort*, [2006] Daily Env't Rpt. (BNA) No. 59 (March 28), at A-5; *cf.* Robert Hahn & Peter Passell, *Time to Change U.S. Climate Policy*, 4 *The Economists' Voice*, iss. 5, art. 2 (2007), available at <http://www.bepress.com/ev/vol4/iss5/art2> (link), (arguing for cap and trade over tax on grounds of political feasibility).

¹⁵ *See* Merrill, *supra* note 10, at 281–89 (observing paucity of market-based regulation and dominance of distributional concerns over efficiency in past environmental legislation).

¹⁶ David Leonhardt, *What is John Dingell Really Up To?*, N.Y. TIMES, Sept. 5, 2007, at C1.

¹⁷ *Id.*

ple-minded for a political pro like Representative Dingell. Perhaps another factor is at work: Representative Dingell knows that pain is on the way for the auto industry, and a tax will help to share the pain with some other big emitters, notably the oil industry and the utilities—or possibly even shift a bit more of the pain to them. I do not mean to present Representative Dingell as the bad guy; for the moment, he is the good guy for floating the politically radical idea of carbon taxes, whatever his motives. But the chief reason why these polluter-pay proposals now seem feasible may be that so many entities are involved in greenhouse gases that no single interest group can dominate the discussion, opening things up for ideas that economists like, especially taxes.

Nevertheless, most of the proposals are for cap-and-trade rather than emission or carbon taxes, and there are some other political reasons for this. The most obvious reason is self-seeking on the part of current emitters. Unlike taxes, cap-and-trade emission entitlements are easy to grandfather to the polluting entities themselves, and this feature makes cap-and-trade attractive to those entities and their lobbyists.¹⁸ But other reasons are not necessarily self-seeking. For one thing, we already have experience with cap-and-trade, from our own SO₂ program and from Europe and Japan's more recent but somewhat messy experience with greenhouse gas emission trades.¹⁹ For another, a U.S. cap and trade program would help American firms to make connections with those other countries' existing programs, and also to take credit for any voluntary reductions they already made while waiting for the U.S. to catch up.²⁰ For still another, there are some important global distributional questions that are tricky to address with taxes. As the economists have noted, the best tax would be uniform throughout the world, to prevent the "leakage" problem that occurs when firms relocate to low- or no-tax jurisdictions.²¹ The trouble with this desideratum is that it requires less developed countries (LDCs) to agree to a tax that puts their new industries in the same boat with those of the United States and Europe—a dim prospect, given the LDCs' fervent opposition.²² A cap-and-

¹⁸ Merrill, *supra* note 10, at 286–89.

¹⁹ See, e.g., Keith Bradsher, *Outsize Profits, and Questions, in Effort to Cut Warming Gases*, N.Y. TIMES, Dec. 21, 2006, at A1 (describing payments made to destroy Chinese-manufactured air conditioning chemical being sufficiently lucrative to encourage expansion of manufacturing plants).

²⁰ See Nicholas DiMascio, Note, *Credit Where Credit Is Due: The Legal Treatment of Early Greenhouse Gas Emissions Reductions*, 56 DUKE L. J. 1587, 1589–90 (2007) (noting that under any future U.S. cap and trade program, credits are likely for firms' past voluntary greenhouse gas reductions); Jeff Goodell, *Capital Pollution Solution?*, N. Y. TIMES MAG., July 30, 2006, § 6 (describing creation of Chicago Climate Exchange as potential vehicle for emissions trades between U.S. and other countries).

²¹ See Scott, *supra* note 14 (citing CBO official Robert Shackleton in speech noting that economists prefer global uniform tax); see also Jonathan B. Wiener, *Think Globally, Act Globally: The Limits of Local Climate Policies*, 155 U. PA. L. REV. 1961, 1967–73 (2007) (describing various facets of "leakage" issue in non-universal control systems).

²² See Scott, *supra* note 14 (citing CBO official Shackleton's observation that less developed countries object to a uniform tax).

trade program, on the other hand, can grant LDCs some extra allowances or a higher baseline, with the effect that U.S. and European industries will buy up some of their allowances, effectively paying them to use cleaner technology or plant trees.²³

Payoffs to LDCs bring up another issue between these two MBR approaches. One big lesson of the U.S. acid rain program is that trade allows substitute performance. Where costs differ as between different players, substitute performance can save a lot of money. Trade effectively gives an emitting entity a third option: in addition to (1) fixing the problem with better technology or less activity, or (2) paying the cost of emissions (by buying rights or paying taxes), (3) it can also pay somebody else to fix emission problems more cheaply in some other plant. This additional choice is obvious with cap-and-trade, but taxes can have the same third option if they add a gimmick: tax credits for substitute performance or “offsets.”²⁴ Either way, the emitter can save on compliance costs, while the substitute performer gets paid to cut back on emissions. On the whole, LDCs offer CO₂ emitters a lot of chances for cutting costs through substitute performance while providing the LDCs with some benefits too; European or American firms could more easily install new technology in the LDCs’ new plants than in their own old ones, or they could buy up conservation easements as offsets, encouraging LDCs to halt old growth forest burnoff and incidentally preserve importantly biodiverse habitats.

But wait! Conserving old growth forests doesn’t count! The Kyoto Protocol does not allow credits for them, thanks in large part to the Europeans, who have few forested areas themselves and who are notoriously tight-fisted about giving credit for any kind of forestry projects.²⁵ To be sure, old-growth credits might help damp down the forest flames that now pour CO₂ into the air around the equator, and to be sure, old-growth forestry conservation would yield a two-for-one payoff in habitat conservation. But alas, conserving existing forests is not “additional” enough.²⁶ And besides, the gas-slurping Americans might get away with something undeserved if

²³ See Sheila M. Olmstead and Robert N. Stavins, *A Meaningful Second Commitment Period for the Kyoto Protocol*, ECONOMISTS’ VOICE, May 2007, at 4, available at <http://www.bepress.com/cgi/viewcontent.cgi?article=1230&context=ev> (link) (noting that unlike uniform tax, cap-and-trade could permit control over global distributional effects of greenhouse gas reduction).

²⁴ See Flatt, *supra* note 1, at 142–45 (discussing issue of offsets in cap-and-trade context and noting issues as well as differing treatment in current legislative proposals).

²⁵ See Masahiro Amano & Roger A. Sedjo, FOREST SEQUESTRATION: PERFORMANCE IN SELECTED COUNTRIES IN THE KYOTO PERIOD AND THE POTENTIAL ROLE OF SEQUESTRATION IN POST-KYOTO AGREEMENTS 31 (2006), available at <http://www.rff.org/Documents/RFF-Rpt-ForestSequestrationKyoto.pdf> (link) (describing conflicts between Europe and United States over forestry credits, very narrow credits actually allowed for trades under Kyoto Clean Development Mechanism).

²⁶ See *id.* at 32 (noting requirement of “additionality” beyond current measures); Dennis D. Hirsch, *Trading in Ecosystem Services: Carbon Sinks and the Clean Development Mechanism*, 22 J. LAND USE & ENVTL. L. 623, 630 (2007) (describing Kyoto requirement of additionality).

they can just pay for trees instead of cleaning up their act.²⁷

Fortunately, resistance toward forestry credits appears to have softened in the recent Bali discussions of post-Kyoto measures.²⁸ But there has always been more to forestry offset concerns than mere jealous pouting. Offsets of any kind can generate big savings, but they also call forth “The Revenge of the Naggers.” As Professor Flatt observes, offsets in general raise a multitude of questions: Just what can be substituted for what? Are all these offsets really fungible? And can you monitor them?²⁹ Sure, CO₂ here can trade for CO₂ there—it is all the same. But what about CO₂ for methane? Methane is harder to measure, so how does that factor into the equation?³⁰ Rough equivalents may be all that can hoped for, but how rough is too rough? Forests may be the most problematic of all, because each forest can be very different from others, and the contribution of each to climate control is very hard to assess. Tropical rainforests might be fine, but as Professor Flatt points out, boreal forests may do more harm than good in global warming.³¹ To be sure, they absorb CO₂, but they are just too *green*, absorbing too much heat in places that would otherwise be snowy white and reflect the sun's rays back into the atmosphere. Brandon Scarborough, writing for the Property and Environment Research Center, an outfit that generally reveres markets and property rights, thinks that forestry entitlements are not going to work as offsets, because they are too variable and too complicated.³² I think this is wrongheaded; some allowances (at least for tropical rainforests) will do a lot of good, both to reduce deforestation and to get LDCs on board with any plan. But in the realm of offsets, the naggers' questions are still important ones, both about measurement and about fungibility.

In the final analysis, as Professor Flatt emphasizes, MBR methods are not a be-all and end-all for climate change control.³³ We have a long history of command-and-control regulation, and we have had many important successes with it.³⁴ Aside from that, as Professor Flatt points out, a lot of

²⁷ See Philip M. Fearnside, *Saving Tropical Forests as a Global Warming Countermeasure: An Issue that Divides the Environmental Movement*, 39 *ECOLOGICAL ECON.* 167, 171, 177 (2001) (ascribing European opposition to forestry offsets to a European wish to force the United States to pay more for energy usage and/or reduce its energy-consuming lifestyle).

²⁸ See Tom Wright, *New Tool May Help in Fight to Curb CO₂: Radar Enables Better Monitoring of Commitments to Preserve Forests*, *WALL ST. J.*, Jan. 3, 2008, at B3 (describing new verification technology as well as increased concern to allow forestry conservation credits in Bali meetings).

²⁹ See Flatt, *supra* note 1, at 143.

³⁰ See Salzman & Ruhl, *supra* note 9, at 629 (noting that greenhouse gases differ in important ways).

³¹ See Flatt, *supra* note 1, at 143.

³² See Brandon Scarborough, *TRADING FOREST CARBON: A PANACEA OR PIPE DREAM TO ADDRESS CLIMATE CHANGE?*, 7–10, 20 (July 2007).

³³ See Flatt, *supra* note 1, at 136.

³⁴ See generally Wendy E. Wagner, *The Triumph of Technology-Based Standards*, 2000 *U. ILL. L. REV.* 83 (praising command and control regulation based on specific technology).

Americans seem to prefer command-and-control regulation to MBRs.³⁵ Professor Flatt suggests vehicle energy standards as a candidate for continued regulation of a more traditional *dirigiste* type.³⁶ I am unsure about that particular application, but it is clear that MBRs are not for everything. Resources for the Future researcher Dallas Burtraw, who has advocated MBR ideas for a long time, draws the line along the axis of monitoring.³⁷ MBR approaches will only work on the kinds of resources and resource uses that we can monitor. That is true of cap-and-trade, and it is true of taxes too. Unless we know what is going in and coming out, we simply cannot use property rights or taxing regimes effectively; they will unravel in a great heap once the first cheaters give license to the others to relax their own compliance. But with monitoring (and of course enforcement), MBRs have a chance, and the cheaper and the more effective the monitoring, the better that chance is. Failing the possibility of adequate monitoring, however, the only option is to fall back on more traditional regulation, insisting on particular technology.

The bottom line is that MBR approaches are, after all, market-based *regulation*, and they require competent governmental supervision, even if nothing more than monitoring and enforcement. MBR approaches in the environment are a fancy form of a property right, and like many other kinds of property, they offer opportunities for efficient resource management and mutually beneficial trades. But in the end, even fancy property needs good cops.

³⁵ See Flatt, *supra* note 1, at 137.

³⁶ See *id.*

³⁷ See *Climate Change: Lessons Learned from Existing Cap and Trade Programs: Written Testimony Before the Subcomm. on Energy and Air Quality of the H. Comm. on Energy and Commerce*, 110th Cong. 5 (2007) (statement of Dallas Burtraw, Senior Fellow, Resources for the Future), available at http://www.rff.org/Documents/RFF-CTst_07-Burtraw.pdf (link) (arguing that only sectors with clear baselines and monitoring ability are subjects for tradable rights).