Landmarks and Land Mines

What the past tells us about crafting a workable climate regime

Bradley M. Campbell

he emerging political consensus supporting a comprehensive federal program to reduce carbon emissions sets the stage for passage of a climate bill early in the next Congress. This consensus, which counted both presidential candidates and a majority in the Congress among its adherents, appears to encompass means as well as ends, with the weight of opinion coalescing around the Lieberman-Warner bill, S. 3036, establishing a cap-and-trade regime.

So why take this moment to revisit the consensus and overhaul the presumed elements of a legislative approach, especially when Lieberman-Warner has played such a transformative role in advancing the climate debate and raising its profile?

For several reasons. Despite its basic soundness and broad support, the bill failed to muster the votes needed for floor consideration. With the presidential transition, the headwinds from the White House may diminish, and the new Senate and House composition may be more conducive to final passage of a bill, but many of the political and institutional impediments to producing an effective program to control greenhouse gas emissions will remain. Moreover, the experience of administering the Clean Air Act Amendments of 1990 and other environmental statutes suggests that some fundamental rethinking is needed if climate legislation is going to be effective.

Specifically, lawmakers and policy leaders need



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to look past the totemic successes of the 1990 amendments and understand the flaws that have haunted that statute. Broad support for cap-and-trade rightly has been premised on the success of the CAA amendments' acid rain provisions, which demonstrated the efficacy of a market mechanism to achieve cost-effective emission reductions. But the history of the amendments, and the experience of administering other major environmental statutes, provides as many reasons to depart from past regulatory models as to repeat them.

If past is indeed prologue, a fundamental departure from prevailing legislative and regulatory models — and major change in the current climate approaches — is needed if GHGs are to be controlled in an effective and timely way. Indeed, the shortcomings of the 1990 CAA and other environmental statutes would be magnified in the context of addressing climate change, due both to the nature of the threat and the belatedness of the response. These shortcomings include Congress's limited ability to produce legislation; the size of the anticipated carbon market; an utter want of latitude and limited tools given to EPA for implementation; and a broken agency rulemaking process.

The most disturbing lesson of the 1990 CAA and other environmental statutes in responding to the climate crisis concerns time. At this writing, it is fair to observe that after almost a full generation the amendments are still not fully implemented, are still winding their way through the courts, and are still changing dramatically in their understood scope and import. Within just the last 18 months, a critical element of the agency's authority has been established (with the Supreme Court validating EPA's authority to regulate GHGs in *Massachusetts v. EPA*), and a major clean air regulatory program under the statute has been struck down (with the D.C. Circuit invalidating EPA's Clean Air Interstate Rule in *North Carolina v. EPA*).

In the context of the climate crisis, the predomi-

nant scientific view strongly suggests that we do not have the luxury of time. We cannot afford to invest 18 years in rulemaking, debate, and litigation to decide the major contours of a GHG regulatory program. In this sense, the decision in *Massachusetts* stands less as a landmark victory for climate change action than as a cautionary tale: a disturbing testament to the success of the opponents of GHG regulation, both in and out of government, to exploit the shortcomings of the statute and the relevant institutions of governance to delay meaningful action on climate over a decade. In crafting a response to climate imperatives, we must be mindful that a victory delayed for 18 years is as good as a loss.

Accordingly, many of the proposals here are intended to guard against the risks of delay, and to overcome the political and institutional factors that tend inevitably to produce delay. In some cases, these issues warrant minor or major revisions of legislative proposals; in other cases they require executive leadership; and in still others they challenge us to rethink and repair much of what is not working in our environmental governance.

Regulate as You Legislate

n guarding against risks of delay, a threshold question is whether Congress can be relied upon to legislate at all. The members' failure to deliver a climate bill to President Bush, despite majority support and the tacit endorsement of both presidential contenders, gives little reason for confidence.

While most attribute this failure to the specter of Bush's veto, that threat is likely to be replaced by other political obstacles — economic anxiety driven by high gasoline and electricity prices among them — that already have created rifts among lawmakers otherwise allied on climate change. A letter by 10 Senate Democrats on the eve of a cloture vote on S. 3036, reciting a host of economic concerns and criticisms, reminds us that the failure of climate legislation can be attributed as easily to Democrats on the Hill as to Republicans in the White House.

But there is a longer history of Congress's limited ability to enact major environmental legislation, which makes clear that bipartisan support and presidential endorsement are no guarantees of a timely signing ceremony. Most major environmental statutes came to life after catastrophic events. Congress's record in acting before catastrophe hits has been spotty.

In the 18 years since the 1990 CAA, Congress has only twice enacted a major environmental bill (the Safe Drinking Water Act Amendments and Food Quality Protection Act, both in 1996), and nearly every environmental statute and program is now well beyond its stated authorization. Despite a bipartisan consensus, presidential support, and the endorsement of groups from the Sierra Club to the Chemical Manufacturers Association, Democratic Leader George Mitchell (D-Maine) balked at bringing Superfund reauthorization and reform legislation to the floor in the 103rd Congress. The pattern repeated itself under Republican leadership when, despite a bipartisan compromise bill by Senators Max Baucus (D-Montana) and Dirk Kempthorne (R-Idaho) that was strongly supported by the administration, Majority Leader Trent Lott (R-Mississippi) refused to bring an Endangered Species Act reauthorization and reform bill to final passage in the 105th Congress.

Given congressional failure to enact a major environmental proposal for the past 12 years, it is critical for the new administration to begin regulation of GHGs using its current authority at the same time that it engages in the legislative process.

While both presidential candidates indicated a preference for legislation to address climate change rather than the use of current authority, an immediate and aggressive start to a GHG regulatory program under current law will have significant and salutary impacts. First, it will make clear that Congress must act or else cede the field to the new administration. Second, it will signal to congressional and other opponents of action that stopping climate legislation will mean a different GHG regulatory program, rather than the absence of a program. Third, regulatory action provides a fail-safe, ensuring that a program will be in place at some level even if Congress fails to act. Further, an early and detailed regulatory program may allow Congress to narrow the scope of issues that must be addressed in a bill, reducing the risks that inevitably attend — and more often than not sink — a complex environmental measure.

To be sure, legislation is needed if we are to have the best possible program to reduce GHGs. The arguments that follow reinforce that view. But an administration regulatory initiative clearly would be complementary to and supportive of the legislative process, in addition to providing an important backstop in the event Congress repeats its pattern of failure.

Elevate EPA to Status Commensurate With its New Role

sing existing authority, a GHG regulatory program necessarily would be housed at EPA. Legislation, by contrast, offers the opportunity to revisit the appropriate agency roles in addressing carbon emissions.

Most previous legislative proposals follow the example of the 1990 CAA amendments in assigning the roles of chief regulator, market arbiter, and allowance auctioneer to EPA. There is a fundamental difference, however, between the modest sulfur dioxide cap-and-trade regime established by the amendments among a limited number of emission sources already regulated by EPA at the time, and the ambitious attempt to establish an economywide program contemplated today for GHGs.

Carbon trading promises to create what would be the largest commodity market in the world, coupled with an auction-allocation regime generating billions of dollars in annual transactions. This is a difference in both kind and degree from the acid rain program.

As a former EPA official, I remain persuaded that the fundamental questions of environmental science, program implementation, and enforcement properly belong at EPA. That view is tempered by the recognition that the agency will need a significant infusion of new resources to perform these tasks, and the further recognition that many functions — policing market integrity in an international market of this scale — might optimally be placed elsewhere. EPA is well suited, today, to determining (and revising) the levels of needed reductions, the appropriate sources for those reductions, and the validity of specific carbon reduction or offset claims. The agency is less well suited to deciding whether a carbon emission allowance is a commodity or a security, or to responding effectively to price manipulation or market collusion.

On this issue, as on others, time provides the dispositive argument for giving EPA the leading role. While GHG market and regulatory responsibility might ideally be allocated among a number of agencies, or invested in a new agency tailored to the unique challenges presented, the reality is that a new organizational approach will consume precious time and engender unaffordable delay.

But the vastly different nature and scope of economy-wide GHG regulation, when compared to sector-specific regulation of criteria pollutants under the CAA, require Congress to recognize the need to equip EPA accordingly. The agency not

only will need a significant increase in funding and personnel, it will need to establish or bolster its expertise in key disciplines related to market oversight and enforcement if a GHG regulatory program is to succeed.

In addition, EPA's leading role in addressing this critical regulatory challenge argues for the president to communicate unequivocally that the agency speaks for him, and ideally for Congress to reinforce that message by taking the long-overdue step of giving EPA cabinet status. Inevitably, EPA's success will depend on the complementary work and programs of fellow agencies, foremost among them the departments of Energy, Transportation, and Treasury. If EPA is to succeed in bringing a successful program out of the mire of interagency squabbling that is emblematic of bureaucratic Washington, it must come to the table as an equal with these other departments and the undisputed lead on the issue. If the United States is to resume the international leadership role on climate that it has abdicated for the past eight years, the president and Congress must confer on EPA's leader a status commensurate with the economic, environmental, and security responsibilities that EPA will take on under any GHG regulatory system.

Just as importantly, if the president-elect is to establish early on that he will restore EPA's mantle of credibility after eight years in which the agency was used to oppose meaningful action on climate change, cabinet elevation or its political equivalent is essential.

Empower EPA With the Tools and Flexibility Needed for the Job

PA not only needs to be elevated, it needs to be fully empowered and equipped. It is imperative that the new administration gives the agency the leading role in crafting legislation, and that Congress give EPA the power and flexibility to administer the statute in a responsive and innovative manner.

For all of the confusion that reigns in the early days of a new administration, the new president must anoint an EPA administrator- or secretary-designate who articulates a unitary view as the legislative and regulatory processes unfold. There is no room or time for cacophony.

One of the anomalies of the process leading to the 1990 amendments was that the Bush administration permitted EPA to transmit its proposed legislation to Capitol Hill with little or no interagency review, which generated the further anomaly that the White House spent much of the legislative

process thereafter trying to moderate what was ostensibly its own proposal. Later legislative debates during the Clinton administration were similarly fraught with delay and confusion as the Executive Branch spoke with many voices. In a particularly notorious example, President Clinton's Department of the Treasury publicly and naively proposed to eliminate retroactive liability under Superfund, even as the rest of the administration was seeking to defend (albeit with reforms) the existing liability scheme. This squabble no doubt contributed to the failure to enact a bill. A repeat of such embarrassments will severely diminish the prospects for climate legislation.

This is not to suggest that agencies other than EPA should be excluded from the new administration's internal deliberations or the crafting of its proposals. There is great merit to a robust internal debate among agencies with different missions and areas of expertise. The benefits of those discussions will be realized, however, only if EPA has the authority and support to bring the debate to a timely conclusion and to speak with authority as legislation develops.

EPA's empowerment must extend to the substantive terms of the statute as well as the process to craft it. Congress's penchant for highly prescriptive legislation affording the agency no latitude is ill-suited to the dynamic environment and likely uncertainties associated with regulating GHGs. Congress should also enlarge the toolbox available for implementation, authorizing the use of fees, taxes, or tax credits in areas where the cap-and-trade or more traditional regulatory approaches are unlikely to be effective or practical.

The long-running drama over mercury regulation under the CAA provides vivid illustration of the dangers and unintended consequences of prescriptive legislation

A Regulatory Conundrum

he challenge we face in effectively curbing greenhouse gas emissions is significantly different from our previous efforts to clean up the nest. In the decades ahead and on a global scale, it requires the transformation of our vital energy sector, not to mention how we use the land.

For our part in the United States, the Clean Air Act is not adequate to these tasks, nor is the Environmental Protection Agency adequate as the sole fount of federal action, though both will be very important in moving us forward.

It is widely believed that the basic architecture for nationally regulating emissions should entail a price on carbon, either through a tax or a cap-

and-trade mechanism. It is also widely recognized that a price on carbon, while a necessary condition for success, is not a sufficient one. Reform of the transportation sector is Exhibit A.

This leaves a major policy conundrum for which our congressional and regulatory processes are not well suited: how to construct and coordinate such policies to minimize the downside risks of limiting innovation and adding excessive cost.

Politically, *Massachusetts v. EPA* has provided the next administration a powerful tool to move recalcitrant industries and reluctant members of Congress to support legislative action. Substantively, it empowers the government to begin regulating emissions.

If Congress fails to act, or if the administration seeks to avoid regulating under the CAA, more lawsuits will be filed to insist on regulating. The path through the courts is not only available to those who want to block action; it is also available to those who want to force action.

If Congress does act — and I believe it will — one question that needs serious attention is just how much change is necessary in the CAA?

Many members of Congress are unlikely to want to write a blank regulatory check. Here there is fruitful analysis to be done by lawyers and economists in anticipation of congressional action. How much guidance and how much restriction should Congress place on the agency?

Congress may continue along the path of the Lieberman-Warner bill, which would grant new authorities for a cap-and-trade system, but essentially leave untouched authorities that regulators

> or courts may insist be utilized. We need to think through the various permutations and examine whether the two systems of regulation can mesh effectively, or whether one might undermine the effectiveness of the



other, and with what cost consequences. If, for example, sources were required to surrender allowances under the cap-and-trade system and also meet specific performance standards, the likely result, on its face, is to significantly undercut the benefits of the cap system. But this conclusion needs more careful study.

Since Massachusetts v. EPA, designing CO₂ controls no longer starts with a tabula rasa. Great attention must be given to the integration of new authorities with old or else a strong case needs to be made that we can effectively advance our environmental and economic interests with the two systems in place.

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that limits EPA's authority and flexibility. Long after mercury's pernicious effects as a neurotoxin of particular danger to infants and developing fetuses were well-established among the scientific community, long after body burdens of anthropogenic mercury were reaching unhealthy levels in significant proportions of women of child-bearing age, and long after passage of the amendments, the agency was still jumping through the procedural hoops Congress had set as a precondition to regulating mercury from power plants. The statutory requirement of an agency determination concerning the need to regulate, supported by elaborate documentation of the science and prior to any actual regulation of emissions, delayed effective rulemaking for nearly two decades. EPA still does not have in place a valid mercury standard for power plants, and the void has been filled by a patchwork of inconsistent state requirements.

Certainly, there also were prescriptive statutory provisions in the CAA that helped expedite implementation and emission reductions, as where Congress decided the initial acid rain program design and emission allowance entitlements. The critical lesson is that prescription should not take the form of procedural impediments to action, and that Congress should clearly state that the terms of the program it prescribes at the outset are subject to change — both at the core and at the margins — as EPA implements the program and learns where changes are needed.

The distrust of EPA that leads Congress to prescriptive statutory provisions, little regulatory discretion, and a single set of tools — as reflected in the mercury example — runs deep and spans the entire political spectrum. But it ultimately precludes timely emission reductions, stymies rational agency approaches to regulatory challenges, and impedes the agency's ability to respond to new or unexpected conditions. It is another luxury we cannot afford in confronting climate change

Trust the Market, not the Cost Projections

wo central points of debate in 1990 were the virtues of a market-based approach to controlling acid rain, and, relatedly, the likely cost of the CAA's requirements overall. In hindsight, the cap-and-trade approach has proven highly effective at reducing emissions and minimizing the cost of emission reductions. In hindsight, the use of market mechanisms, the innovation generated by stringent standards, and the advance of technology resulted in

compliance costs that were far lower than those presented to Congress during the legislative process — in some cases by an order of magnitude.

Lawmakers in the climate debate often seem to have learned only the first of these lessons. To be sure, cap-and-trade now inspires near religious enthusiasm, strengthened by wide recognition — absent in 1990 — that fuel choices, electricity dispatch decisions, and consumer impacts will be the same regardless of whether emission allowances are given away, as under the CAA, or auctioned off to generate revenue for program support and complementary energy initiatives, as anticipated in Lieberman-Warner.

But the concomitant lesson — that contemporaneous cost projections are inherently hazardous and likely to be as overstated as they were in 1990 — has been missed, as lawmakers seek to couple market mechanisms with direct or indirect political fixes to carbon prices.

The focus on political price fixes in the carbon market had its immediate antecedent in the Regional Greenhouse Gas Initiative, when then Massachusetts Governor Mitt Romney walked away from the agreement after insisting, without success, on an absolute cap on prices at the absurdly low level of \$10 per ton. The market distrust reflected in Romney's posture — and reinforced by Nobel laureate Joseph Stiglitz and other prominent economists — had its impact on the negotiators who thereafter completed the agreement (as a matter of disclosure, I confess I was among them). As a consequence, RGGI incorporates a number of purported safety valves, by which compliance obligations and the use of offsets become more flexible as prices exceed certain benchmarks.

There are numerous problems with statutory price controls in the carbon market. In terms of politics, Congress is unlikely to set price caps or price triggers for other measures to moderate carbon prices at a level high enough to reach desired levels of emission reductions. At a more practical level, as was true in 1990, Congress is unlikely to have accurate projections of likely costs of carbon emission reductions for purposes of crafting such measures. For reasons already discussed, Congress almost surely will not have the ability to respond quickly to new information as markets develop and changes are needed.

In addition, by introducing political measures to reduce moderate prices and reduce volatility, Congress creates a set of political risks for carbon reduction projects that are likely to discourage capital flows into the emission-reduction, carbon sequestration, and offset sectors. Congress also creates an invitation for the regulated community to game the

price of carbon to ensure the triggers are reached and price relief afforded, thereby undermining remission reductions. Moreover, a set of statutory safety valves threatens to dampen the development of private-sector responses to price risk — such as hedging and banking — that will be far more effective over the long term in creating price stability and far less inimical in the short term to investment in carbon reduction technologies.

The clear lesson from the CAA amendments is that the market will be more effective at minimizing both prices and price volatility than any political price-setting, and that price projections and attendant fears are almost certainly overstated. If price safeguards are ultimately essential politically, they should be entrusted to the agency's discretion rather than tied to a specific number that may prove inappropriate as the market develops. Here again, the better answer is to provide EPA with the latitude to address any market failures or dysfunction through a broadly defined range of tools. These tools can then be deployed based on better information than Congress will have on hand as it crafts the statute the information gained from experience in administering and policing the market.

Create a Different Regulatory Model

he fact that it has taken two decades to implement the 1990 CAA amendments is attributable not merely to the deficiencies of the statute, but also to the accretion of administrative and judicial practices that has made rulemaking slow, unwieldy, unresponsive, and ultimately far less effective than is needed for GHG regulation.

The federal rulemaking process has become a lawyers' Elysium, in which each regulatory proposal requires elaborate justification, generates voluminous comment, and requires in turn meticulous agency responses to every comment. Any substantial change along the way requires a further comment period, and the full process often consumes years even prior to judicial review. Judicial review then may add a further delay of years to the process of implementation, and notwithstanding the administrative law pieties suggesting otherwise, courts afford little or no weight to an agency's views in interpreting the statute and deciding whether a rule is lawful. Note, for example, that EPA's view of the CAA has been rejected in the past 18 months both for under-reaching (with respect to its authority to regulate GHGs) and overreaching (with respect to authority for the Clean Air Interstate Rule).

If an agency error is found, the result is to re-

mand the disputed regulation to the agency to start again, on the same glacial timetable.

To describe this model is to mock it. It is a model that makes prompt regulatory action impossible; a model that dampens innovative approaches by the agency; a model that precludes timely correction or improvement of regulations once unfairness, mistakes, omissions, or better approaches are revealed; and a model that eliminates any vestige of the predictability or certainty that the regulated community seeks. It is also a model that nearly guarantees that any new GHG regulatory regime will fail to meet the exigencies of time dictated by the science of climate change.

The challenge of GHG regulation thus presents an especially compelling case for reform of our sclerotic regulatory practice. Substantively, Congress should require that courts give agency interpretations of the climate statute a high degree of deference, and should state explicitly that the presumptive validity of regulations can be overcome only if a litigant demonstrates that the agency has no substantial basis in the record for its position. The judicially imposed requirement that an agency respond to every comment should be eliminated by statute. Judicial stays of regulations pending litigation should be prohibited in all but extraordinary cases. And where a regulation is found on review to be flawed, courts should be required to order the curative amendment to the rule rather than remand to the agency to rehearse the rulemaking process.

These proposed reforms highlight the opportunity that the climate statute presents for Congress to establish a specialized Article III court for oversight of regulations, charged with highly expedited review and subject to alteration only by the Supreme Court. When coupled with the substantive changes to the terms of judicial review of agency regulations, there is the opportunity to reinvent the regulatory system to be more effective, responsive, and innovative — far more rational responses to agency mistrust than prescriptive statutes and cumbersome rulemaking.

When measured against the climate legislation offered to date, and considered in the context of environmental politics more generally, many of the proposals here may seem whimsical, even naive. But it is far more naive to ignore the relevant history and many failures of the 1990 CAA amendments and other statutes, and then expect to achieve different and better results using the same model to respond to more daunting and urgent challenges of climate change. The failure of broadly supported climate proposals in the last Congress documents the need for better approaches, and gives us the time — but not too much — to get it right. •