# The Politics and Religion of Clean Air

**Robert W. Hahn**

Hardly a day goes by without some reference to our precious environment, or the specter of impending environmental catastrophe. In 1970 thousands of demonstrators descended upon Washington to protest against industrial pollution and to proclaim a holiday in honor of Mother Earth. At the end of the same year, the Environmental Protection Agency was established to protect and enhance our environment by controlling and abating pollution in the areas of air, water, solid waste, pesticides, radiation, and toxic substances.

To enable the EPA to discharge its mandate, Congress, armed with a cursory understanding of the environmental problems, enacted a steady stream of legislation aimed at cleaning up the nation's air and water. To fix the problem, Congress told industry what it could and could not belch from its smokestacks, how clean it would need to make new cars, and the type of pollution control devices it would have to install. The cost today of all of these gadgets and process changes amounts to about $80 billion per year with $30 billion for air pollution alone. This $80 billion represents a form of invisible tax on users of commodities that are produced by industry. Whether we are getting our money's worth is the subject of heated debate.

All signs suggest that these expenditures will increase as our "consciousness" expands. A recent survey suggests that two of three Americans favor increasing spending to control acid rain and dumping of toxic wastes. In another survey, about the same fraction suggested that they were willing to pay an additional $100 per year in taxes over the next decade to clean up the toxic waste problem. Whether these survey respondents and the American public will feel the same way when confronted with the actual price tag and associated lifestyle changes remains to be seen.

Politicians the world over have been quick to capitalize on the change in environmental attitudes. In the 1990s the environment is likely to be one of the main issues they will use to mobilize the electorate. The recent economic summit for developed countries featured the environment as an issue, and conservatives, such as Mrs. Thatcher, were out in front on the global climate issue. Indeed, there seems to be a widespread concern on the part of world leaders that they will be left behind if they do not make some environmental policy pronouncement that has a catchy tune. The race is on, both nationally and globally, for who can be the most "green."

It is in this political environment that President Bush has presented his Clean Air Act proposal to demonstrate his commitment to the environment. Designed to break the political logjam of the preceding decade, the bill has something for almost everybody. It is aggressive environmentally, calling for a 10 million ton reduction in sulfur oxides emissions—a main contributor to acid rain. It also contains some of the most innovative regulatory reforms ever to be incorporated in a sweeping piece of environmental legislation. Whether these reforms will survive intact remains to be seen.

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My purpose here is to examine the forces that gave rise to this landmark legislative proposal. In the process, I shall review what is really novel and also what is not. This will set the stage for speculating on the nature of U.S. environmental policy in the years to come. Finally, I shall offer some closing observations about the limited role played by economics in framing this debate and suggest where economics is likely to make a difference and where it is not.

### The Environmental President

George Bush did not need an environmental movement to remind him that the environment is an important spiritual and economic resource. His deep commitment to the environment is reflected, in part, in his political choice to head the EPA—William Reilly. Reilly has been a very effective spokesman for the environment and has helped bring some credibility to the Republican party on environmental issues.

The political dimensions of the environmental movement have not been lost on the Republican party. President Bush has staked out aggressive policies in a number of environmental areas, including the phase-out of chlorofluorocarbons by the end of the century, clean air, reforestation, and the preservation of wetlands. If this momentum continues, Republicans may be able to woo many moderate voters.

Balancing Bush's environmental concerns is a recognition that environmental progress needs to go hand in hand with a healthy economy. Indeed, as vice president, he participated in several innovative regulatory decisions, such as the market-based approach to substantially reduce lead in gasoline, that made sense from both an environmental and an economic perspective.

Thus, it should come as no surprise that Bush was the first national politician to place market-based environmental reforms at the center of his innovative proposals for restructuring the Clean Air Act. At the same time, the appointment of Administrator Reilly, along with the resurgence of public concern for the environment, also gave rise to a bill that is comprehensive in scope and environmentalist in spirit.

### The Clean Air Act in a Nutshell

Bush's proposal for revising the Clean Air Act focuses on three main problems—acid rain, smog, and air toxics. Acid rain has been a major concern to our Canadian neighbors and to the Northeast because of damages to lakes and forest resources that are thought to result from manmade emissions of sulfur oxides ($SO_x$) and nitrogen oxides ($NO_x$). Smog typically arises in urban areas that fail to impose adequate controls to meet the federal standards for conventional pollutants such as carbon monoxide, ozone, and particulate matter. "Air toxics" refers to a large class of pollutants, such as benzene and asbestos, that have been identified as toxic or carcinogenic and that can be found in minute quantities in some airsheds.

The president's acid rain initiative calls for a combined annual reduction of 12 million tons—10 million tons of sulfur oxides (from a 1980 baseline) and 2 million tons of nitrogen oxides (from their projected levels in the year 2000). These objectives would be achieved by the year 2000. What is unique about the proposal is the heavy reliance placed on markets in "allowances," which are limited forms of property rights in pollution. Firms, typically electric utilities, would be allowed to trade these allowances when they found it in their interest to do so. This market approach would induce firms with low-cost pollution control technologies to clean up more and thus would reduce the overall cost of achieving environmental quality goals by about 50 percent, or over $13 billion, compared with traditional command-and-control approaches, which specify the precise technology that firms must use.

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Another unique feature of the bill is that it would allow reductions in $NO_x$ to be traded off against increases in $SO_x$ and vice versa. Thus, the proposal implicitly recognizes that there is some rate at which pollutants can be traded off for each other, a point that, although scientifically and economically sensible, had not passed the political "smell" test in earlier federal environmental legislation.

One area that did not pass the "smell" test in the

administration's acid rain proposal was the regulation of new sources—specifically utilities. New sources would still be required to meet the most stringent standards. This requirement raises costs substantially while doing nothing to improve environmental quality, but it does pay homage to special interests—particularly the high-sulfur coal lobby and the environmental community.

The approach to smog varies with the particular pollution problem. The president's bill promises to bring virtually all urban areas into attainment with the standard set for ozone by the year 2000, with the exception of a few highly polluted urban areas such as Los Angeles, Houston, and New York. By and large the portion of the bill addressing smog embraces the traditional command-and-control approach to regulation with a high degree of federal involvement. For example, the approach calls for stricter tailpipe standards, the installation of special nozzles on gasoline pumps at service stations in areas that do not meet the ozone standard, and a further reduction of volatile compounds in gasoline.

Complementing the conventional controls on vehicle emissions is an ambitious program to introduce "alternative fuel" vehicles, which would have significantly lower emissions than the existing gasoline-powered internal combustion engine. Candidates include vehicles that run on methanol, ethanol, electricity, reformulated gasoline, and natural gas. The proposal calls for the introduction of 1 million clean-fueled vehicles annually from 1997 to 2004 in the nine areas with the most serious ozone problems. This requirement would be relaxed only if the area could show that it could achieve equivalent reductions (in terms of ozone and toxic emissions) through some other approach. Because such equivalence would be difficult to demonstrate, critics of the administration's proposal have argued that this is a thinly veiled proposal to mandate methanol in selected areas.

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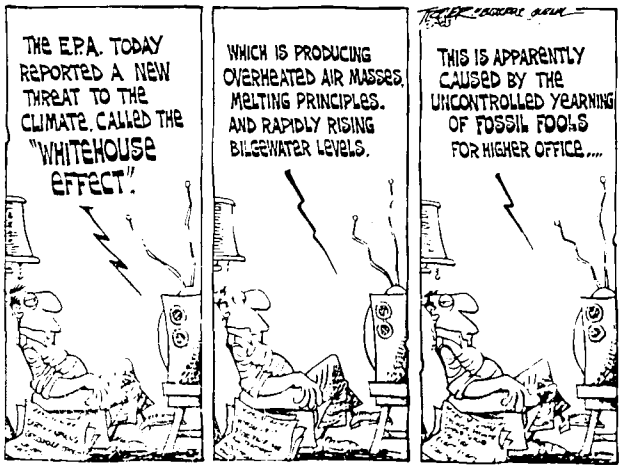


In addition to controlling emissions from vehicles, there are a host of measures aimed at controlling "stationary" sources of pollution, ranging from factories and large manufacturers to small establishments such as bakeries and wineries. For the most part, the bill does not specify precisely which industries will be regulated, but it does provide the EPA with new authority to issue specific regulations governing a wide array of sources. While the agency is instructed to issue the most cost-effective guidelines first, there is no attempt to organize a market in stationary source emissions that would ensure that the emissions reductions were achieved in the least costly manner.

There is, however, a unique aspect of the bill that would allow automobile companies to trade off tailpipe emissions against emissions from other parts of the vehicle, such as the engine or the gas tank, and that would allow refiners to provide a mix of fuels that meets overall environmental objectives, without specifying production requirements for individual fuels. Bush highlighted this flexible approach in his speech on clean air, where he directed the EPA "to develop rules like those we're employing on acid rain to allow auto and fuel companies to trade required reductions in order to meet the standard in the most cost-effective way." Like the acid rain proposal, Bush's directive for reducing vehicle emissions promises significant cost savings and will achieve reductions that are equivalent to or greater than those resulting from traditional command-and-control measures.

The third substantive portion of the bill deals with the control of air toxic pollutants. Here, the bill attempts to cut the emissions of cancer-causing pollutants by over 75 percent with an estimated reduction of as many as 1,000 cancer deaths annu-

ally. Unlike many of the bills on the Hill, the president's bill explicitly recognizes that a significant portion of the risks associated with air toxics comes from mobile source emissions. At the same time, it puts in place a program of traditional command-and-control regulation that would require the EPA administrator to impose the "maximum achievable control technology" for major sources. Moreover, there is a fixed timetable for regulating source categories. In addition, the second phase of the bill calls for the administrator to evaluate the adequacy of the new controls and to determine whether the residual risk from certain categories of sources poses an "unreasonable risk." Unlike the first group of controls, which are essentially mandated, the residual-risk determination allows the EPA to consider a host of factors, including costs and benefits, before proceeding with additional controls.

There is considerable disagreement about the costs of the administration's proposal. These costs will be borne in the form of higher prices to consumers for goods and services, most notably electric rates in the case of acid rain legislation. The administration estimates the increased costs to be between $15 billion and $19 billion annually. This estimate does not include a careful analysis of the cost of moving to the second phase of air toxics legislation, which could easily double the cost of the bill if the administrator decided to reduce air toxics by 99 percent. It also fails to take a realistic account of the cost of meeting the ozone standard in highly polluted areas since it assumes that technologies that do not exist will emerge at a reasonable price. This may be true for some cities, but is wildly optimistic for Los Angeles, which is in a class by itself when it comes to pollution. Thus, the administration's estimate of costs is likely to be a lower bound; actual costs could be three or even four times as high, depending on how the regulations are implemented and whether the technology is available. If technological innovation slows or the law is interpreted strictly—something that has not happened in the past—costs could increase dramatically. At the same time, if the proposed market-based initiatives on acid rain and vehicle emissions are implemented, this could stimulate innovation that would reduce costs.

One potentially critical element in the estimate of costs that has been left out of the equation is the administration's proposed changes in the permitting process. Under current law, most firms are required to obtain construction permits, but do not have to obtain operating permits from the federal government. The proposed Clean Air Act amendments would require almost all stationary emission sources to have an operating permit approved by the EPA. This sounds like a good idea on the surface, except that it dramatically expands the power of federal bureaucrats. Under the proposed law, it will be even more difficult to engage in emissions trading than under current law. If a firm wants to raise its emissions, it will have to obtain permission from the federal EPA, which can delay processing the firm's request if it so chooses. Permitting costs will increase substantially, making it more difficult for new businesses to compete. This proposal creates a full-employment act for lawyers, provides incentives for firms to locate abroad, discourages innovation, and does little, if anything, to improve the environment.

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Ironically, to date, most of the attention in the press and on the Hill has focused on acid rain. Perhaps this is so since the acid rain program is new, and the goals of the acid rain program can be conveyed easily on the evening news. In terms of costs, however, controlling acid rain is far less expensive than controlling ozone and may also be less expensive than controlling air toxics.

While the costs of clean air legislation will be offset to some extent by the benefits, it is difficult to develop precise estimates of benefits. Suffice it to say that the benefits of acid rain reductions are highly uncertain, that the health benefits of ozone reductions in most areas do not appear to be worth the costs on the basis of narrow economic criteria, and that the benefits of reducing air toxics appear to be very small. (See the articles by J. Laurence Kulp, Kenneth Chilton and Anne Sholtz, and Frederick H. Rueter and Wilbur A. Steger in this issue.) In any case, because estimates of economic benefits typically span a wide range, and because these benefits are only tangentially related to political benefits, such economic calculations did not, and will not, play a central role in the clean air debate.

The administration's proposal, in summary, represents a curious blend of the new and the old.

Command-and-control regulation is still dominant, but a serious attempt is made to introduce market-based reforms in reducing vehicle emissions and emissions contributing to acid rain. The proposal does not attempt to redefine the goals of air pollution regulation, nor does it question the growing federal presence in environmental regulation—indeed, it expands this presence substantially. It does, however, suggest new ways of addressing old problems.

### Religious and Political Aspects

Politicians are constantly trying to reframe and invent rights in response to political demands. One of the more curious notions to emerge from the constant stream of political rhetoric on the environment is that Americans have an *inalienable right* to breathe clean air. If we take this as a religious truth, it follows that costs should be no object in pursuing our goal. But what about the goal itself—how clean is clean? Again, if we are to interpret "clean" literally, as is frequently done in legislation, clean means "zero pollution." With this simple truth, it follows that benefit-cost analysis on environmental issues is irrelevant. Indeed, any notion of balancing that makes tradeoffs between the environment and other things we value cannot be undertaken.

The preceding religious view, initially developed by the environmental community, has been sold to the American people by politicians and environmentalists who stand to gain directly. The acceptance of this view has had and continues to have tremendous implications for environmental politics and policy. Congressmen and presidents have been quite successful in parlaying concern about salient environmental concerns, such as Love Canal and global warming, into increased positive name recognition that enables them to pursue their own political agenda. Moreover, there has been an increasing trend for the federal government to take over the responsibility of protecting this inalienable right. In some cases, where the problem is national or international in scope, such as global climate change, such federal involvement makes sense, but for problems where the benefits and costs of the policy are localized—such as the shutdown of a copper smelter in Tacoma or cleaning up the Los Angeles ozone problem—federal involvement does not make much sense.

But what makes sense is not the point; it is simply a matter of politics. Indeed, understanding the basic religious tenet and political motives of elected

officials reveals much about the form of legislation that passes. As noted earlier, much environmental legislation calls for what is effectively zero pollution. For example, the Clean Water Act called for eliminating all discharges into navigable waterways by 1985. Superfund, EPA's latest budget buster, has requirements that sites be clean enough that passers-by can fill their canteens if they wish. These are laudable goals, but there is a vast gulf between the reality and the rhetoric. And while the goals may not be achieved, there is little, if any, balancing of benefits and costs in the enabling statutes. Certainly, there are some exceptions, such as the regulation of pesticides and toxic substances, where notions of unreasonable risk allow some balancing, but in many cases the administrator's hands are tied by well-meaning and politically rational decisionmakers that we elected.

Instead of moving toward approaches that permit balancing, the legislative trend in the environmental arena is to control smaller and smaller risks. Again, this is consistent with the inalienable right to breathe clean air, but it may have serious economic repercussions if there is not a serious debate about what we are giving up in exchange for these not always successful attempts to reduce risks.

If economists' views do not carry much weight in the choice of environmental policy goals, we might hope that at least "pure" scientists would have more luck. But the situation is not demonstrably better for them. While they testify along with their social science brethren, they are most effective in shaping issues that are not politically central. (See the article by S. Fred Singer in this issue.) On a "hot" issue, such as acid rain, political concerns dominate. Indeed, the 10 million ton reduction in sulfur oxides emissions was not based on scientific or economic grounds. It was selected because it was viewed as "credible"—that is, it was acceptable to Congress, the environmental community, and our Canadian neighbors. Again, the point is that politics is the central force, and sometimes the only force, when the issue is front-page news.

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### Environmental Politics: Some Constants

There are two basic forces that shape environmental policy—the environmental community and industry. While this characterization is a gross simplification, understanding what motivates these two groups helps to explain the nature and evolution of environmental policy.

Environmentalists believe that Americans have an inalienable right to clean air. As a result, their demands are basically insatiable. Costs do not matter. There is a job to do, and it needs to be done correctly. Environmentalists tend to view any introduction of explicit tradeoffs as sacrilege, and they are skeptical of any attempt to shorten the list of environmental priorities. It is much easier to point to problems that have been added to the environmental legislative dockets than to those that have been removed from the agenda.

This attitude implies that environmentalists are rarely, if ever, satisfied with political compromises, at least in their public statements. Compounding the problem is their limited direct experience with making decisions that directly affect the environment. As a result, environmentalists rarely find themselves in a position where they must carefully weigh the competing needs of different interests.

The environmental community is superb at achieving its ends. EPA bureaucrats, many of whom are environmentalists themselves, and environmental lobbies are quite experienced at the Washington game. They know how to manipulate the press, EPA political appointees, and Congress, and it is in the interest of these players to oblige in most cases. In many instances the environmentalists have a direct pipeline to selected members of the press, who welcome stories that show how big business or insensitive government officials do not care about the needs of the planet. Sensational stories get good press, and environmental issues are easily sensationalized.

An insight into the behavior of the environmental community is provided by its response to the administration's bill. The environmentalists went to great lengths to argue that the bill had been substantially weakened since the president's initial pronouncements. While this was not true, the press

picked up the theme and ran with it; the White House chose not to respond because it was a no-win situation. The result was that the environmentalists put themselves in a better bargaining position. Their response when the administration's bill was finally released was also informative. Although the administration had a much more aggressive bill on acid rain than did Rep. Henry Waxman, almost all environmental groups were very guarded in their support for the administration and continued to forge an alliance with the congressman.

Specific examples of making strategic use of the *Washington Post* abound. My favorite concerns the implementation of some of Bush's market-based proposals. Just before the president was about to make some critical decisions on his Clean Air proposal, David Hawkins, an environmental advocate, was asked to offer his views on these approaches. Hawkins, not one to mince words, replied, "If the president accepts this, he's putting ideological, economic experimentation first and clean air second." It is interesting that the reporter chose not to solicit the views of the Environmental Defense Fund, another strong environmental lobbying group, that decided to jump ship and support a market-based approach for the control of acid rain because it made good environmental and economic sense.

The counterforce to the environmental community is the business community, which I loosely refer to as industry. This group assesses environmental issues primarily in terms of their impact on profits. To the extent that environmental quality improvements adversely affect industry's bottom line, the business community will generally oppose such improvements. At the same time, industry recognizes that public opinion and the politics of environmental issues have shifted. Consequently, business has attempted to support a bill that represents the lesser of many evils.

While industry tries to maintain a unified front in dealing with environmentalist concerns, unity is difficult to achieve. Because each individual industry prefers to have another industry clean up the environment, this leads to obvious competition among industries. For example, the auto industry has argued against "onboard" controls, which involve placing a larger canister in cars to recover gasoline vapors. Similarly, the petroleum industry has argued against "Stage II" equipment—a vapor control system placed on nozzles at gas pumps. Both systems perform the same basic function. The administration chose to require Stage II equipment because it was less expensive and could be targeted at highly polluted regions. Interestingly, a compromise in the House between Rep. John Dingell and Rep. Henry Waxman would require both! If this compromise sticks, it is hard to see who, other than the politicians, would benefit, since the economic costs are substantial and the environmental benefits are small and may even be negative.

Competition among industries also arises in shaping environmental goals that affect the demand for specific products. For example, an aggressive acid rain bill will substantially alter the pattern of demand for fuels such as high-sulfur coal, low-sulfur coal, oil, and gas. Individual industries will thus try to forge alliances (even with environmental groups) that ensure that the demand for their product is enhanced.

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Some persistent themes emerge from the continued interaction of well-organized environmental and industry lobbies in the political arena. One is that the political compromises represent a curious blend of economics and environmentalism and sometimes lead to perverse results. For example, new sources are almost always regulated more stringently than old sources. From a political perspective, this makes sense because new sources do not vote. From an environmental perspective, the outcome is appealing because it implies that when new sources are built, the air will be much cleaner. Yet, as critics have shown, such regulation can provide an incentive to extend the life of existing plants, which will slow the rate at which cleaner technologies are introduced and perhaps lead to dirtier air.

The tension between these groups also manifests itself in the ways problems are framed. As noted earlier, the environmentalists promote symbolic goals, such as zero pollution and/or zero risk. Industry can live with such goals provided there is distance between rhetoric and reality. One way to impose such distance, and one that Congress has selected, is to allow for lax monitoring and enforcement of many of the environmental laws that are on the books. Thus, the two opposing groups can find some areas of common ground on which to build compromises.

### Changes in the Political Landscape

There are two major factors that have altered the political landscape. The first is a demand-side change—politicians perceive an increased demand for federal environmental action on both domestic and global issues. The second is Bush's active role in shaping the environmental agenda.

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Because many of the relatively low-cost "fixes" for environmental problems have already been adopted, policymakers, particularly the president, are left in a quandary. While wanting to do something constructive, Bush must balance these concerns with a desire to promote economic growth. Both the president and certain congressmen see market-based environmentalism as a logical solution to this problem. The recent *Project '88* report, sponsored by Sen. John Heinz and Sen. Timothy Wirth, shows that some members of Congress also recognize the potential for innovative environmental reforms to save money and to promote environmental innovation.

Yet the environmental community, by and large, tends to resist such reforms. Flexible approaches are alleged to be fraught with loopholes, despite data that suggest that these approaches can yield impressive cost savings without sacrificing environmental quality. For example, in recent hearings on the Clean Air Act, Rep. Waxman chided and castigated Administrator Reilly for advancing a proposal on trading vehicle emissions among manufacturers. Not surprisingly, Waxman argued that the administration's approach would not achieve the same emissions reductions as his command-and-control tailpipe approach. In reviewing the administration's proposal, the congressman also rediscovered what I like to call the "Lake Wobegon effect"—a flexible approach for meeting a targeted level of emissions reductions implies that some firms will reduce more than the average while others will reduce less. Waxman concludes from this that each firm cannot possibly be doing the "best" it can. I conclude that outside of Lake Wobegon, it is difficult for everyone to be above average.

Of course, if the same level of emissions reductions is achievable at lower cost, why should Waxman or the environmental community care? The reason, I believe, has to do largely with symbolism. It is easier for politicians and environmental lobbying groups to communicate with the public in terms of doing the job right and implementing the best technology than it is to create a flexible decentralized approach that yields the same outcome at lower cost. Moreover, politicians may be less able to make political trades in devising a decentralized approach. These political downsides notwithstanding, politicians and environmentalists are being forced to consider such approaches because of the high costs of environmental control and the growing recognition that flexible market-oriented approaches can work in selected applications, such as the control of acid rain.

Market approaches are most likely to be supported by the environmental community when it believes that these approaches will significantly increase the likelihood that a more stringent emissions target will be selected. Market approaches are likely to receive the support of the business community when they are perceived to be less costly than the likely alternative. In the case of acid rain, one could argue that markets are needed to achieve the 10 million ton reduction in $SO_x$ emissions. This partially explains why environmentalists would reluctantly accept this result. Similarly, utilities, while opposing the 10 million ton goal, have reluctantly accepted that markets may be the best way to achieve that goal. In contrast, no such consensus existed for the vehicle emissions trading proposal. Environmentalists did not see any immediate advantage in supporting this proposal rather than stricter tailpipe standards, and the auto industry decided against staging a battle because it had better places to spend its limited political capital.

### What Will the Future Bring?

In this era of "ducks" and "no new taxes," social regulation has some very attractive features. It need not appear on the budget, and it can effectively meet the increased demands of the public for action. Because of its relatively low political cost and the perception that demand has increased, we can expect social regulation, particularly environmental regulation, to increase over the next several years. I find it interesting to note, for example, that the $15 billion to $19 billion projected cost of the administration's Clean Air Act exceeds the $12 billion

increase in budgetary authority required to accommodate *all* of the initiatives contained in the president's State of the Union address.

I predict that a "new and improved" Clean Air Act will be signed into law before the next Congress is convened. The passage of this act will result from Bush's active involvement along with the political "dynamic" that has been created. It is too costly for the Democrats to allow the Republicans to take this issue away from them while they stand idly by. At the same time, it would be very difficult for the president to veto a bill when it emerges from Congress, unless he can make the case that the bill contains references to ducks.

The bill sent up by the White House will serve as the floor, to which "ornaments" will be added. Automobile industries can be expected to take a larger "hit" on traditional tailpipe standards and warranties of cars. A group of northeastern states already has agreed to adopt California's standards for vehicles, and this provides yet another rationale for Congress to clamp down further on vehicle emissions, even in areas that meet the standard.

One area where costs could rise astronomically is in controlling air toxics. The Senate is currently considering adding a "bright-line" risk factor of one in 1 million in the second phase of air toxics controls. Such risk levels are currently unachievable for parts of many industries, including petroleum, pesticides, steel, and paper, to mention a few. Indeed, the EPA has estimated conservatively that job losses would be in the neighborhood of 100,000 to 200,000, a figure that dwarfs the direct job loss that could result from acid rain. The economic and human costs imposed by such a program could be stupendous, and such an industrial policy should not be adopted without carefully examining the consequences for U.S. competitiveness.

Special interests will begin dissecting the bill to see how it can be used to their advantage. Examples include the coal lobby's promoting clean-coal technology through government subsidies, the natural gas industry's promoting natural-gas-fueled vehicles for fleets, the ethanol lobby's trying to extend the tax credit for ethanol, and a host of other lobbies that are too numerous to mention here. All of this represents politics as usual in Washington—from each according to his ability, to each according to his political clout.

The flexible initiatives developed by the administration will undergo close scrutiny. I doubt that the proposal on vehicle emissions trading will survive. It did not have strong support from either the automobile companies or the environmental community. Some flexibility on acid rain will be retained because it has widespread support and is probably a necessary element of the political compromise. The problem is complicated, however. Sen. Robert Byrd, head of the powerful Senate Appropriations Committee, can be expected to lobby strongly for forced scrubbing. Rep. Dingell is trying to undermine the initiative with an alternative that calls for using fees along with some limited trading. If Congress attempts to address regional impacts by introducing explicit cost-sharing through the use of fees and subsidies, it is difficult to predict what will happen. The beauty of the administration's proposal is that it recognizes that markets may provide the best form of cost-sharing because they are more efficient than any of the alternatives.

The fate of the alternative-fuels initiative offered by the president is less clear. The petroleum industry has waged an effective battle to soften some elements of this proposal related to the alleged "mandate"; and the environmentalist response to this section of the proposal has been lukewarm. I would not be surprised to see a compromise emerge that allowed reformulated gasoline to play a larger role.

In terms of broader themes, we can continue to expect a full-employment act for environmental lawyers and the courts, which have played a very important role in environmental policy over the last two decades. The secular trend toward the federalization of environmental policy will continue, in part, because it enables Washington-based lobbying groups to exercise greater control while enhancing their reputations. The gap between rhetoric and reality will also stay with us. Congress will continue to blame the EPA and the administration for failing to meet the objectives set forth in legislation, when, in fact, insiders know that this is all part of the administrative charade.

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Finally, we should not be surprised to see language on pollution taxes in the years to come. This is a rational response to the political need to address the deficit issue. Moreover, such taxes can be justi-

fied in terms of "user fees" and the "polluter-pays" principle, both of which have some intuitive appeal.

### Is Rationality Dead?

If nothing else, I hope to have demonstrated that political rationality is alive and well in shaping environmental policy. At the same time, the role of science and economics is limited, particularly in the legislation itself. In drafting legislation, politicians are free to ignore scientific facts and economic forces. These forces will, however, often rear their ugly heads outside the beltway, where scientific laws and economic realities often play a dominant role in implementing pollution-control programs.

**Until people see a direct connection between environmental cleanup and their consumption of other goods and services and begin to seriously question the judgment of their political leaders on these matters, things are unlikely to change.**

A broader issue relates to the role that science and economics may play in framing future environmental issues ranging from banning the spraying of Alar on apples to determining a policy for climate change. I think that science will help to identify the range of problems, but neither economics nor science will play a prominent role in balancing the risks posed by various activities.

In short, we are likely to remain on our current path for the foreseeable future. Environmental commitment will continue to be measured first and foremost in terms of dollars thrown at the problem. As Administrator Reilly noted in characterizing the president's bill, "We got a program that adds 50 percent or maybe more to what the country lays out on pollution control every year. And, by heaven, that is a strong measure of presidential commitment." Money is an important measure of commitment, but there are other measures that can be used, such as what we get for the money and what we give up by taking the money from somewhere else. Of course, raising issues of costs and benefits naturally leads to that nasty notion of tradeoffs, which violates the religious tenet that clean air is an inalienable right.

A fundamental change in the religious tradition will result only if environmentalists see some value in explicitly balancing competing environmental objectives. This change will occur if there is a fundamental shift in how environmentalists participate in the policymaking process. One way of expediting this shift would be to give environmental groups more responsibility for managing some of the federal resources currently under the control of government agencies, such as the Park Service and the Forest Service. Such management experience might give these groups a different perspective on religion and reality and might lead them to a more careful articulation of environmental priorities.

Ultimately, however, the public gets what the public wants. Until people begin to see a direct connection between environmental cleanup and their consumption of other goods and services and begin to seriously question the judgment of their political leaders on these matters, things are unlikely to change. Industry and economists will be forced to acquiesce on issues of balancing costs against benefits, just as they were in the Clean Air Act. To provide just one example, industry lobbied the administration to adopt a command-and-control approach in the first phase of reducing air toxics, not because it made sense economically, but because it provided some certainty and political cover.

While there is a great deal of inertia in the current environmental policy process, not everything is preordained. The president can shape major policy initiatives, as he did on clean air. The area of global climate is crying out for a reasoned approach to a difficult issue. Other policy entrepreneurs can also affect outcomes by exploiting slack in the system, which allows discretion in the choice of particular standards as well as the means by which particular standards will be met. Whether this slack is exploited by command-and-control regulators or by advocates of more flexible approaches will depend on the policy entrepreneurs' skills in manipulating the political process.

**Selected Readings**

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