CHAPTER

2

Environmental Policy



The American Context Entrepreneurial Politics: Global Warming Majoritarian Politics: Pollution from Automobiles Interest Group Politics: Acid Rain Client Politics: Agricultural Pesticides The Environmental Uncertainties The Results

WHO GOVERNS?

- 1. Why have environmental issues become so important in American politics and policy-making?
- 2. Does the public get the environmental laws it wants?

TO WHAT ENDS?

- 1. If we wish to have cleaner air and water, how far should we go in making them cleaner when the cost of each additional gain goes up?
- 2. What is the best way for the government to achieve an environmental goal: by issuing orders or offering incentives?

verybody loves the environment. A large majority of the American public believes that the government should do more to protect it. Over 80 percent of college freshmen believe that the government is not doing enough to control pollution, far more than the number who think the government is doing too little about disarmament, protecting the consumer, or controlling handguns.¹ No one wants to be called a "polluter." A staff member in the George W. Bush administration briefed the president over two hundred times. When asked what issue got the most attention in Washington, his answer was clear: the environment.²

Why, then, is environmental policy so controversial? There are four reasons. First, every governmental policy, including one established to protect the environment, creates both winners and losers. The losers are the people who must pay the costs without getting enough of the benefits. Sometimes those losers are influential interest groups. But sometimes the losers are average citizens. They may love the environment, but not enough to change the way they live in order to enhance it. For example, automobile exhausts are a major cause of smog, but not many people like the idea of being told to leave their cars at home and take the bus to work.

Second, many environmental issues are enmeshed in scientific uncertainty: the experts either do not know or they disagree about what is happening and how to change it. For example, some people worry that society is burning so much fuel (thus producing a lot of carbon dioxide) and cutting down so many trees (thus reducing the plants available to convert carbon dioxide back into oxygen) that the earth will soon become a greenhouse: the excess carbon dioxide in the earth's atmosphere will prevent heat from escaping, and so the earth will get warmer with disastrous effects for humanity. But there are some scientists who say that human activity is not a major cause of global warming; instead, they argue, it is the result of natural changes in the earth's temperature.³

Third, much environmental policy takes the form of entrepreneurial politics mobilizing decision-makers with strong, often emotional appeals in order to overcome the political advantages of the client groups that oppose a change. To make these appeals, people who want change must stir up controversy and find villains. Many times this produces desirable changes. But it can also lead to distorted priorities. For example, it is much easier to make dramatic and politically powerful arguments about a pesticide that causes a minute increase in the risk of cancer than it is to dramatize the runoff into our rivers and oceans of polluted water from farms and city streets.

Finally, environmental politics profoundly affect how the federal government deals with states and with other nations. The states have passed more than three dozen laws

to lower the emission of various greenhouse gases and have influenced how Washington handles cleaning up toxic waste sites.⁴ During the Clinton administration, the government participated in drafting the 1997 Kyoto Protocol that called for a 5 percent reduction worldwide in greenhouse gases, but aware that the Senate was strongly opposed to this treaty President Clinton never pushed for its ratification. Senators had noted that the treaty would allow several countries, such as China and India, to keep generating greenhouse gases but would require that the United States cut energy use by 25 percent by 2012.⁵ The George W. Bush administration scrapped the treaty.

★ The American Context

Environmental policy, like welfare policy, is shaped by the unique features of American politics. Almost every industrialized nation has rules to protect the environment, but in this country those rules are designed and enforced in a way that would be baffling to someone in, say, Sweden or England.

First, environmental policy making in the United States is much more adversarial than it is in most European nations. In this country there have been bitter and lasting conflicts over the contents of the Clean Air Act. Minimum auto emissions standards are uniform across the nation, regardless of local conditions (states can set higher standards if they wish). Many rules for improving air and water quality have strict deadlines and require expensive technology. Hundreds of inspectors enforce these rules, and hundreds of lawyers bring countless lawsuits to support or challenge this enforcement. Government and business leaders have frequently denounced each other for being unreasonable or insensitive. So antagonistic are the interests involved in environmental policy that it took thirteen years, from 1977 to 1990, to agree on a congressional revision of the Clean Air Act.

In England, by contrast, rules designed to reduce air pollution were written by government and business leaders acting cooperatively. The rules are neither rigid nor nationally uniform; they are flexible and allow plenty of exceptions to deal with local variations in business needs. Compliance with the rules depends mostly on voluntary action, not formal enforcement. Lawsuits are rare. Business and government officials do not routinely accuse each other of being unreasonable. You might think that all this sweetness and light were the result of having meaningless rules, but not so. As David Vogel has shown, the improvement in air and water quality in England has been at least as great as, if not greater than, that in the United States.⁶

A second feature of environmental policy here is that, as in so many other policy areas, what is done depends heavily on the states. Though there are uniform national air quality standards, how those standards are achieved is left to the states (subject to certain federal controls). Though sewage treatment plants are in large measure paid for by Washington, they are designed, built, and operated by state and local governments. Though the federal government decrees that radioactive waste must be properly disposed of somewhere, the states have a big voice in where that is. When Congress decided in 1982 to select places in which to dispose of such waste, it announced that sites would be chosen on the basis of "science." But of course no state wanted to get such waste, so all objected. In the congressional committee that made the final decision in 1988, Nevada had the least influence, and so Nevada got the waste. In a federal system of government, "science" rarely makes allocative decisions; local politics usually does.

Federalism reinforces adversarial politics: one of the reasons environmental issues are so contentious in this country is that cities and states fight over what standards should apply where. But federalism is not the whole story. The separation of powers guarantees that almost anybody who wants to wield influence over environmental policy will have an opportunity to do so. In England and in most European nations, the centralized, parliamentary form of government means that the opponents of a policy have less leverage.*

It would take a book almost as long as this one to describe all the environmental laws and regulations now in effect in this country and to discuss the endless controversies over how those rules should be changed or expanded. Since 1963 some three dozen major federal environmental laws were enacted, and, at the start of the 109th Congress in 2005, a half dozen more were proposed.

In this chapter we want to explain how environmental policy is made. Controversies over controlling pollution from stationary sources, such as factories

^{*}Here, environmental pressures are brought by interest groups; in Europe, where such groups have less influence, environmentalists form political parties, such as the Green party, so as to be represented in the legislature.

WHAT WOULD YOU DO?

MEMORANDUM

To: Senator Diane Gray From: Keith Mays, legislative assistant

Until recently, you could get a tax cut if you bought a hybrid car. But it was only

available for the first 60,000 cars built by any manufacturer.

Arguments for incentives:

- 1. We need to reduce gasoline consumption and our dependence on foreign oil.
- 2. Hybrid cars consume much less gasoline.
- 3. A tax break to buyers of hybrid vehicles that rely on both electric and gasoline engines will provide a stable market that will encourage sales.

Arguments against incentives:

- 1. We can more easily cut fuel consumption by raising taxes on gasoline.
- 2. Many hybrids get worse gas mileage than several conventional cars.
- 3. The past tax breaks, with the 60,000 car cap, were essentially a support for domestic car builders who were being beaten in the market by Japanese producers.

Your decision:

Support _____ Oppose ___

Subsidizing Hybrid Cars

June 6

HOUSTON, TX

Congress plans to take up a plan to give government tax breaks to people who buy hybrid vehicles . . .

and power plants, take the form of entrepreneurial politics-many people hope to benefit from rules that impose costs on a few firms. Policies intended to reduce air pollution caused by automobiles involve majoritarian politics-many people hope to benefit, but many people (anyone who owns a car) will have to pay the cost. The fight over acid rain has largely been a case of interest group politics-regions hurt by acid rain (mainly in the Northeast) argue with regions that produce a lot of acid rain (mainly in the Midwest) about who should pay. Finally, there are examples of *client* politics at work-for example, when farmers manage to minimize federal controls over the use of pesticides. Most people are unaware of what food contains what pesticide or which, if any, are harmful; farmers are keenly aware of the economic benefits of pesticides and are well organized to defend them.

★ Entrepreneurial Politics: Global Warming

Entrepreneurial politics created the environmental movement. When an offshore well spewed thousands of gallons of oil onto the beaches of Santa Barbara, California, at the very time (January 1969) when protest politics was in the air, it became difficult or impossible for the government or business firms to resist the demand that threats to our natural surroundings be curtailed. The emerging environmental movement created an occasion—Earth Day, first celebrated on April 22, 1970—to celebrate its beginning.

The movement was hugely successful. In 1970 President Nixon created the Environmental Protection Agency (EPA) and Congress toughened the existing Clean Air Act and passed the Water Quality Improvement Act. Two years later it passed laws designed to clean up the water; three years later it adopted the Endangered Species Act. New laws were passed right into the 1990s. Existing environmental organizations grew in size, and new ones were formed. Public opinion rallied around environmental slogans.

It is a foolish politician who today opposes environmentalism. And that creates a problem, because not all environmental issues are equally deserving of support. Take the case of global warming.

The phrase means that gases, such as carbon dioxide, produced by people when they burn fossil fuels wood, oil, or coal—get trapped in the atmosphere and cause the earth's temperature to rise. When the



Heavy snow blankets Lafayette, Colorado.

temperature goes up, bad things may follow—floods on coastal areas as the polar ice caps melt, wilder weather as more storms are created, and the spread of tropical diseases to North America.

But our natural concern for global warming must address three difficult questions. First, we do not yet have an accurate measure of how much human activity has contributed to the warming of the earth. The earth has become warmer, but is this mostly the result of natural climate changes, or is it heavily influenced by humans putting greenhouse gases into the air? Second, if human activity is a main contributor, what would it cost in lost productivity and income to reduce greenhouse gases? Since America acting alone cannot eliminate greenhouse gases, we have to figure out how to get other countries, especially rapidly growing ones such as China and India, to absorb their share of the cost. Third, how large would be the gains to humankind, and when would they occur? On the one hand, a warmer globe will cause sea levels to rise, threatening coastal communities; on the other hand, greater warmth will make it easier and cheaper to grow crops and avoid high heating bills.⁷

As with most kinds of entrepreneurial politics, global warming has resulted in a conflict among elites who often base their arguments on ideology as much as on facts. Environmental activists raise money with scary statements about the harm global warming will cause; conservatives raise money with scary statements about the economic pain an American cut in greenhouse gases will cause.⁸ But given the popularity of "the environment" as an issue, the activists dominate

Major Environmental Laws

Smog Clean Air Act (passed in 1970; amended in 1977 and 1990)

- Stationary sources: EPA sets national air quality standards; states must develop plans to attain them. If the state plan is inadequate, EPA sets a federal plan. Local sources that emit more than a certain amount of pollutants must install pollution control equipment.
- Gasoline-powered vehicles: Between 1970 and 1990, pollution from cars was cut by between 60 and 80 percent. Between 1991 and 1998 there was another 30 percent reduction. All states must have an auto pollution inspection system.
- **Cities:** Classifies cities in terms of how severe their smog problem is and sets deadlines for meeting federal standards.

Water Clean Water Acts of various years state that there is to be no discharge of wastewater into lakes

and streams without a federal permit; to get a permit, cities and factories must meet federal discharge standards.

Toxic Wastes EPA is to clean up abandoned dump sites with money raised by a tax on the chemical and petroleum industries and from general revenues. (Many thousands of such sites exist.)

Environmental Impact Statements Since 1969, any federal agency planning a project that would significantly affect the human environment must prepare in advance an environmental impact statement (EIS).

Acid Rain The Clean Air Act of 1990 requires a reduction of 10 million tons of sulfur dioxide (mostly from electric-generating plants that burn coal) by 1995. The biggest sources must acquire government allowances (which can be traded among firms) setting emission limits.

the discussion, and politicians can only with great difficulty criticize their claims.

Another environmental example of entrepreneurial politics is the Endangered Species Act. Passed in 1973, it forbids buying or selling a bird, fish, animal, or plant that the government regards as "endangered"—that is, likely to become extinct unless it receives special protection—or engaging in any economic activity (such as building a dam or running a farm) that would harm an endangered species. Currently there are more than six hundred species on the protected list; about half are plants. The regulations forbid not only killing a protected species but also adversely affecting its habitat.

Firms and government agencies that wish to build a dam, bridge, factory, or farm in an area where an endangered species lives must comply with federal regulations. The complaints of such clients about these regulations are outweighed by the public support for the law. Sometimes the law preserves a creature, such as the bald eagle, that almost everyone admires; sometimes it protects a creature, such as the snail darter, that no one has ever heard of.

★ Majoritarian Politics: Pollution from Automobiles

The Clean Air Act of 1970 imposed tough restrictions on the amount of pollutants that could come out of automobile tail pipes. Indeed, most of the debate over that bill centered on this issue.

Initially the auto emissions control rules followed the pattern of entrepreneurial politics: an aroused public with media support demanded that automobile companies be required to make their cars less polluting. It seemed to be "the public" against "the interests," and the public won: by 1975 new cars would have to produce 90 percent less of two pollutants (hydrocarbons and carbon monoxide), and by 1976 achieve a 90 percent reduction in another (nitrous oxides). This was a tall order. There was no time to redesign automobile engines or to find an alternative to the internal combustion engine; it would be necessary to install devices (called catalytic converters) on exhaust pipes that would transform pollutants into harmless gases.

But a little-noticed provision in the 1970 law soon shoved the battle over automobile pollution into the arena of majoritarian politics. That provision required states to develop land-use and transportation rules to help attain air quality standards. What that meant in practice was that in any area where smog was still a problem, even after emission controls had been placed on new cars, there would have to be rules restricting the public's use of cars.

There was no way cities such as Denver, Los Angeles, and New York could get rid of smog just by requiring people to buy less-polluting cars—the increase in the number of cars or in the number of miles driven in those places outweighed the gain from making the average car less polluting. That meant that the government would have to impose such unpopular measures as bans on downtown parking, mandatory use of buses and carpools, and even gasoline rationing.

Efforts to do this failed. Popular opposition to such rules was too great, and the few such rules that were put into place didn't work. Congress reacted by postponing the deadlines by which air quality standards in cities would have to be met; the EPA reacted by abandoning any serious effort to tell people when and where they could drive.⁹

Even the effort to clean up the exhausts of new cars ran into opposition. Some people didn't like the higher cost of cars with catalytic converters; others didn't like the loss in horsepower that these converters caused (many people disconnected them). The United Auto Workers union began to worry that antismog rules would hurt the U.S. auto industry and cost them their jobs. Congress took note of these complaints and decided that despite a lot of effort, new cars could not meet the 90 percent emission reduction standard by 1975–1976, and so in 1977 it amended the Clean Air Act to extend these deadlines by up to six years.

The Clean Air Act, when revised again in 1990, set new, tougher auto emission control standards—but it pushed back the deadline for compliance. It reiterated the need for getting rid of smog in the smoggiest cities and proposed a number of ways to do it—but it set the deadline for compliance in the worst area (Los Angeles) at twenty years in the future.

Most clean-air laws passed since 1990 have targeted particular industries. For example, in 2004 the Bush administration approved a new measure to dramatically reduce emissions from heavy-use diesel engines used in construction, agricultural, and other industrial machinery. The public will support such tough environmental laws when somebody else pays or when



Kermit the Frog and Magic Johnson display a new hybrid automobile from Ford.

the costs are hidden (as in the price of a car); it will not give as much support when it believes that it is paying, especially when the payment takes the form of changing how and when it uses the family car. Here are more examples of each kind of majoritarian politics.

Majoritarian Politics When People Believe the Costs Are

Low The National Environmental Policy Act (NEPA), passed in 1969, contained a provision requiring that an **environmental impact statement** (EIS) be written before any federal agency undertakes an activity that will "significantly" affect the quality of the human environment. (Similar laws have been passed in many states, affecting not only what government does but what private developers do.) Because it required only a "statement" rather than some specific action and because it was a pro-environment law, NEPA passed by overwhelming majorities.

As it turned out, the EIS provision was hardly innocuous. Opponents of virtually any governmentsponsored project have used the EIS as a way of

blocking, changing, or delaying the project. Hundreds of lawsuits have been filed to challenge this or that provision of an EIS or to claim that a project was not supported by a satisfactory EIS. In this way environmental activists have challenged the Alaska pipeline, a Florida canal, and several nuclear power plants, as well as countless dams, bridges, highways, and

environmental impact statement A report required by federal law that assesses the possible effect of a project on the environment if the project is subsidized in whole or part by federal funds.

Landmark Cases

Government and the Environment

- Union Electric Co. v. Environmental Protection Agency (1976): EPA rules must be observed without regard to their cost or technological feasibility.
- Chevron v. National Resources Defense Council (1984): States should comply with EPA decisions, even if not explicitly authorized by statute, provided they are reasonable efforts to attain the goal of the law.
- Whitman v. American Trucking Associations (2001): Allows Congress to delegate broad authority to regulatory agencies.

To explore these landmark cases further, visit the *American Government* web site at college.hmco .com/pic/wilsonAGIle.

office buildings. Usually the agency's plan is upheld, but this does not mean that the EIS is unimportant: the EIS induces the agency to think through what it is doing, and it gives critics a chance to examine, and often to negotiate, the content of those plans.

Despite the grumbling of many people adversely affected by fights over an EIS (someone once complained that Moses would never have been able to part the Red Sea if he had had to file an EIS first), popular support for it remains strong because the public at large does not believe that it is paying a high price and does believe that it is gaining a significant benefit.

Majoritarian Politics When People Believe the Costs Are

High From time to time someone proposes that gasoline taxes be raised sharply. Such taxes would discourage driving, and this not only would conserve fuel but also would reduce smog. Almost everyone would pay, but almost everyone would benefit. However, it is only with great difficulty that the public can be persuaded to support such taxes. The reason is that the people pay the tax first, and the benefit, if any, comes later. Unlike Social Security, where the taxes we pay now support cash benefits we get later, gasoline taxes support noncash benefits (cleaner air, less congestion) that many people doubt will ever appear or, if they do, will not be meaningful to them.¹⁰

When gasoline taxes have been raised, it has usually been because the politicians did not push the tax hike as an environmental measure. Instead they promised that in return for paying higher taxes the public would receive some concrete benefits—more highways, more buses, or a reduction in the federal deficit (as happened with the gas tax hike of 1990 and again in 1993).

Since it cannot easily cut gasoline use by raising taxes, the government has turned to other approaches. One is to provide tax breaks and other incentives to companies that seek to develop alternative energy sources. Another is to offer incentives to car manufacturers to build vehicles that consume less fuel by relying in whole or in part on electricity.

★ Interest Group Politics: Acid Rain

Sometimes the rain, snow, or dust particles that fall onto the land are acidic. This is called *acid rain*. One source of that acid precipitation is burning fuel, such as certain types of coal, that contains a lot of sulfur. Some of the sulfur (along with nitrogen) will turn into sulfuric (or nitric) acid as it comes to earth. Steel mills and electric power plants that burn high-sulfur coal are concentrated in the Midwest and Great Lakes regions of the United States. The prevailing winds tend to carry those sulfurous fumes eastward, where some fall to the ground.

That much seems certain. Everything else has been surrounded by controversy. Many lakes and rivers in the eastern United States and in Canada have become more acidic, and some forests in these areas have died back. Some part of this is the result of acid rain from industrial smokestacks, but some part of it is also the result of naturally occurring acids in the soils and rainfall. How much of the acidification is man-made and how much is a result of the actions of Mother Nature is unclear. Some lakes are not affected by acid rain; some are. Why some are affected more than others is unclear. The long-term effects of higher acid levels in lakes and forests are also unclear. These scientific uncertainties were important because they provided some support for each side in a fierce interest group battle. Residents of Canada and New England complained bitterly of the loss of forests and the acidification of lakes, blaming it on midwestern smokestacks. Midwestern businesses, labor unions, and politicians denied that their smokestacks were the major cause of the problem (if, indeed, there was a problem) and argued that, even if they were the cause, they shouldn't have to pay the cost of cleaning up the problem.

Here was a classic case of two well-organized parties, one hoping to reap benefits and the other fearing to pay costs, locked in a struggle over a policy proposal. Even before people were aware that acid rain might be a problem, these two groups were fighting over how, if at all, sulfur emissions should be reduced.

An attempt to deal with the issue in 1977 reflected the kind of bizarre compromises that sometimes result when politically opposed forces have to be reconciled. There were essentially two alternatives. One was to require power plants to burn low-sulfur coal. This would undoubtedly cut back on sulfur emissions, but it would cost money, because low-sulfur coal is mined mostly in the West, hundreds of miles away from the midwestern coal-burning industries. The other way would be to require power plants to install scrubberscomplicated and very expensive devices that would take sulfurous fumes out of the gas before it came out of the smokestack. In addition to their cost, the trouble with scrubbers was that they didn't always work and that they generated a lot of unpleasant sludge that would have to be hauled away and buried somewhere. Their great advantage, however, was that they would allow midwestern utilities to continue their practice of using cheap, high-sulfur coal.

Congress voted for the scrubbers for all new coalburning plants, even if they burned low-sulfur coal. In the opinion of most economists, this was the wrong decision,¹¹ but it had four great political advantages. First, the jobs of miners in high-sulfur coal mines would be protected. They had powerful allies in Congress. Second, environmentalists liked scrubbers, which they seemed to regard as a definitive, technological "solution" to the problem, an approach far preferable to relying on incentives to induce power plants to buy low-sulfur coal. Third, scrubber manufacturers liked the idea, for obvious reasons. Finally, some eastern governors liked scrubbers because if all new plants had to have them, it would be more costly, and thus less likely, for existing factories in their states to close down and move into the West.

The 1977 law in effect required scrubbers on all new coal-burning plants—even ones located right next to mines where they could get low-sulfur coal. As two scholars later described the law, it seemed to produce "clean coal and dirty air."¹²

The 1977 bill did not solve much. Many of the scrubbers, as predicted, didn't work very well. And there remained the question of what to do about existing power plants and factories. In the early 1980s the Reagan administration took the position that too little was known to warrant strong action; more research was needed first. The Canadian government and members of Congress from the Northeast took a very different view, demanding that something be done immediately.

For thirteen years there was a political stalemate in Congress, as is often the case when strongly opposed interest groups fight it out. And when a solution was finally agreed upon, it was a compromise. President Bush the elder proposed a two-step regulation. In the first phase 111 power plants would be required to reduce their emission of sulfur by a fixed amount. They could decide for themselves how to do it: buy lowsulfur coal, install scrubbers, or use some other technology. This would be done by 1995. In the second phase, with a deadline in the year 2000, there would be sharper emission reductions for many more plants, and this would probably require the use of scrubbers. To create some flexibility in how much each utility must cut its emissions, a system of sulfur dioxide allowances that could be bought and sold was established. Coal miners complained that they would lose jobs during phase one, and so they were promised some financial compensation if they were laid off as a result of their employers' complying with the new limits. This compromise became part of the Clean Air Act of 1990. By 2005, interest groups, advocates, and experts on all sides of the issue were once again poised to battle each other.

Interest group politics permeates many aspects of environmental policy making. When cities or states consider land-use controls and zoning ordinances, they are weighing the competing demands of established residents (who often want as little new growth in their communities as possible) against demands of developers who want to build additional housing.

Interest group politics often lacks the moral fervor of entrepreneurial politics and rarely taps the deep streams of public opinion that are reflected in majoritarian politics. As environmental policy has become more complex and as people have adjusted to existing laws, however, new interest groups have been formed that have a stake in how things are done. As a result it becomes harder and harder to change existing policies. The heady victories of the early 1970s are hard to duplicate today because groups that were once unorganized are now well organized.

For example, there is now a large and growing industry that makes products designed to improve the environment. As we saw in the acid rain controversy, industry can play an important role in supporting laws that favor their machines, whether or not they are the best solution to the problem. Industry is far better organized today than in 1970 to use its employees and political allies to defend its interests. Similarly, public-interest groups, such as the Environmental Defense Fund, that did not exist in 1965 now compete with other environmental groups for money and publicity. Labor unions, such as the United Auto Workers, that once fought for tough air pollution laws now are worried about whether some of these laws may cost them their jobs.

When the public is asked which should be more important, economic growth or environmental protection, their answers change. In the 1980s and 1990s, they overwhelmingly preferred environmental protection, but by the mid-2000s, a preference for economic growth had risen (see Figure 21.1). However, overall, citizens are environmentalists first.

★ Client Politics: Agricultural Pesticides

Some client groups have so far escaped this momentum. One such group is organized farmers, who have more or less successfully resisted efforts to restrict, sharply, the use of pesticides or to control the runoff of pesticides from farmlands.

For a while it seemed as though farmers would also fall before the assaults of policy entrepreneurs. When Rachel Carson published *Silent Spring* in 1962, she set off a public outcry about the harm to wildlife caused by the indiscriminate use of DDT, a common pesticide. In 1972 the EPA banned the use of DDT.

That same year Congress directed the EPA to evaluate the safety of all pesticides on the market; unsafe ones were to be removed. However, that is easier said than done. One reason is that there are over fifty thousand pesticides now in use, with five thousand new ones introduced every year.¹³ Testing all of these chemicals is a huge, vastly expensive, and very time-



Figure 21.1 Which Should Take Precedence: Environmental Protection or Economic Growth?: 1984–2006

Source: Gallup Poll.

consuming job, especially since any health effects on people may not be observed for several years.¹⁴ Another reason is that pesticides have many beneficial uses; therefore, someone has to balance the gains and the risks of using a given pesticide and compare the relative gains and risks of two similar pesticides.

But even if the science were easy, the politics would not be. American farmers are the most productive in the world, and most of them believe that they cannot achieve that output (and thus their present incomes) without using pesticides. These farmers are well organized to express their interests and well represented in Congress (especially on the House and Senate Agricultural Committees). Complicating matters is the fact that the subsidies the taxpayers give to farmers often encourage them to produce more food than they can sell and thus to use more pesticides than they really need. Though many of these chemicals do not remain in the crops that are harvested, large amounts sink into the soil, contaminating water supplies. But these problems are largely invisible to the public and are



Pesticides help grow better crops, but some worry they may harm the environment.



Environmentalists have used the protection of endangered species, such as the spotted owl, as a way of reducing timber harvests.

much harder to dramatize than, say, the discovery of a toxic waste dump like that at Love Canal, New York.

Though attacked by environmental organizations, farm groups have been generally successful at practicing client politics. The EPA's budget for reviewing pesticides has been kept small.¹⁵ Very few pesticides have been taken off the market, and those that have been removed have tended to be ones that, because they were involved in some incident receiving heavy media coverage (such as the effect of DDT on birds), easily fell prey to entrepreneurial politics.

One of the reasons client politics has been able to protect the use of pesticides despite a political atmosphere that heavily favors environmental safety is that in fact pesticides have trivial effects on long-term human health problems, such as cancer. The most scholarly studies of the tendency of pesticides to cause cancer suggest that they are "unimportant" because "there is no convincing evidence" that they produce cancer.¹⁶

A similar kind of client politics exists in the timber industry. Wood product companies and loggers want access to forests under the control of the U.S. Forest Service. Though only 13 percent of all cut timber comes from these forests and two-thirds of the U.S. forest system is already off-limits to logging, environmentalists want further restrictions, especially to prevent clear-cutting (cutting down all the trees in a given area) and to prevent harvesting trees from the old-growth forests of Oregon and Washington. But Congress has generally supported the timber industry, ordering the Forest Service to sell harvesting rights at belowmarket prices, in effect subsidizing the industry. Some activists hope to convert this client politics into entrepreneurial politics by demanding that clear-cutting in certain forests be stopped in order to protect endangered species, such as the spotted owl.

The Environmental Uncertainties

Making environmental policy strikes many people as easy—identify a problem, raise a fuss, defeat "the interests," and enjoy the benefits. In fact it is much harder than that to have a sane environmental policy.

First, what is the problem? Nobody likes smog, and human waste or oil slicks floating off our beaches are obviously bad. But many other problems are much less clear-cut. Science doesn't know how bad the greenhouse effect is. Pesticides that cause cancer in animals when given in megadoses may or may not cause cancer in people when absorbed in nominal amounts.

Second, if there is a problem, what goals do we want to achieve? We want reasonably clean air and water, of course, but how clean is reasonably clean? Since the cost of removing from the air the last 10 percent of some pollutants is often greater than the cost of removing the first 90 percent, how clean is clean enough? If making air and water cleaner is costly in terms of jobs, energy, and economic growth, how big a price are we willing to pay?

Third, how do we want to achieve our goals? Issuing rules and enforcing them in court often seem the easiest things to do, but they are not always the wisest. That **command-and-control strategy** assumes that

command-andcontrol strategy *A strategy to improve air and water quality, involving the setting of detailed pollution standards and rules.*

the rule makers and rule enforcers know how to achieve the greatest environmental gain at the least cost. In fact no one knows how to do that, because local circumstances, technological problems, and economic costs are so complex. Under what circumstances can we use incentives and market prices to get people voluntarily to clean up their act by using their own imagination?

All of these uncertainties have become part of the endless political controversies surrounding the administration of the Environmental Protection Agency. For example:

What Is the Problem? The EPA was given the responsibility to administer certain laws governing air, water, and pesticides (among others). But it is rarely left alone to define these problems; any new environmental scandal leads to popular and congressional demands that it drop everything and solve that crisis. When toxic chemicals were found at Love Canal and Virginia Beach, these dramatic discoveries put other, less dramatic, but often more important problems on the back burner.

What Are the Costs and Benefits? Everyone wants a healthy environment, but people do not distinguish accurately between realistic and unrealistic threats or between reasonable and unreasonable costs. The biggest scare is cancer, even though every form of cancer has been steadily declining for many years (except lung cancer, which is caused primarily by smoking, not environmental hazards). People fear the unknown—many are afraid of flying, for example, even though flying is vastly safer than driving. People fear strange threats, such as toxic chemicals, even though they may never hurt anyone. People applaud dramatic governmental steps without asking whether they actually help anyone. For example, the government has mandated that



Workers clean up oil spilled by the *Exxon Valdez* after it grounded on Bligh Reef in Alaska's Prince William Sound in 1989.

Who Governs? To What Ends?

Superfund: Cleaning Up Toxic Wastes

During the 1970s hazardous waste sites were discovered all across America. Dangerous chemicals, many used decades before anybody worried about the environment and in some cases involving substances no one knew to be toxic, were found in the soil and near drinking water. These new investigations understandably alarmed many people. They and their legislators wanted this junk cleaned up.

What could be simpler? Find the dangerous stuff and take it out. In 1980 President Carter signed the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund. The law did two things: First, it taxed chemical and petroleum industries and put the proceeds, along with general tax revenues, into a trust fund to pay for cleaning up abandoned hazardous waste sites. Second, the law gave the government the power to sue any person or company (if they could be found) that had dumped the waste. In 1986 the law was strengthened when President Reagan signed a bill that gave the Environmental Protection Agency (EPA) more power and increased the size of Superfund to \$8.5 billion.

But a decade later the results were mixed. Superfund and related laws were associated with steep reductions in levels of toxic chemical releases (few new hazardous waste sites were created), but only 14 of 1,200 known hazardous waste sites had been cleaned up. By 2005 there were still more than 2,000 waste sites that had not been treated. What had gone wrong?

First, finding and suing the responsible parties was very difficult. These "potentially responsible parties" included present and past owners of a site, their insurance companies, and any firm that deposited waste long before a law had been passed saying that it was illegal. Some companies had dumped the junk knowingly, others by accident; still others had long since gone out of business or were bankrupt. Finding them and getting them to pay were slow and difficult processes. As a result a lot of the Superfund money went to hire lawyers, not waste removers.

Second, it is complicated and time-consuming to clean up a site. Some sites had become big industrial plants or suburban housing developments. The EPA never had a staff equal to these high demands. There was a rapid turnover in EPA Superfund managers.

Third, as the environmental lobby got stronger, it put more and more pressure on the EPA to expand the list of hazardous sites and raise the standard for what constituted a cleaned-up site. No one seemed to be interested in developing a clear list of top-priority sites; instead the whole list just got longer.

Nobody wants to live on a toxic waste site. But how do you clean it up? Just by hiring more lawyers to sue more people? The Superfund problem highlights the difficulty of designing an effective strategy and a good administrative system for doing what almost everyone wants done.

all asbestos must be removed from public school buildings. Though intense exposure to asbestos can cause health problems, removing all the asbestos from old school buildings helps almost no one and may hurt the asbestos removers. The problem for government officials is to keep policies aimed at real risks—they do exist—and not to be diverted by popular concerns over unreal ones. In a free society, that is not easy. What Are Our Goals? When the EPA was told by Congress to eliminate *all* pollutants entering our waterways by 1985, to cut auto emissions by 90 percent within five years, and to eliminate smog in *all* cities, Congress should have known that these goals were utterly unrealistic. When the EPA realized that it could not achieve these goals, it was forced to ask for extensions in deadlines and for revisions in laws. This gave it the appearance of knuckling under to industry pressure.¹⁷

How Do We Achieve Our Goals? Initially the EPA was zealous about using a command-and-control strategy to improve air and water quality. For example, to reduce water pollution discharged from factories, the EPA issued rules broken down into 642 industry subcategories, and even then there was a lot of local variation that it could not take into account. When the cost of doing this sort of thing got out of control, the EPA during the Carter administration began to devise incentives to replace some rules. These included offsets, bubbles, and banks:

- Offsets. If a company wants to open a new plant in an area with polluted air, it can do so if the pollution it generates is offset by a reduction in pollution from another source in that area. To achieve that reduction, the new company may buy an existing company and close it down.
- **Bubble standard.** A bubble is the total amount of air pollution that can come from a given factory. A company is free to decide which specific sources within that factory must be reduced in order to meet the bubble standard.
- Pollution allowances (or banks). If a company reduces its polluting emissions by more than the law requires, it can either use this excess to cover a future plant expansion or sell it to another company as an offset.

Once, only affected businesses complained about the high cost, slow progress, and legal complexity of environmental regulations. Increasingly, however, proenvironment interest groups and the government itself have become aware of the difficulties that arise when the government relies on a command-andcontrol strategy that is indifferent to costs and excessively reliant on lawsuits.

When the Clinton administration took office in 1993, it had the strong support of environmentalists. Vice President Gore was a visible and influential supporter of environmental protection; he had even written a book on the subject. Secretary of the Interior Bruce Babbitt was also a staunch environmentalist. But instead of just pushing ahead with more commandand-control policies, the new administration began to reexamine these approaches. It suggested, for example, that the Superfund law, intended to clean up toxic waste dumps, was in fact not cleaning up many sites; instead, it was encouraging armies of lawyers to bring lengthy and costly lawsuits to determine who was responsible for the toxic waste. The administration tried to amend the law, but without much success.

American politics, though often messy, confusing, and conflict-ridden, sometimes changes as people learn from their experiences. Indeed, our political system causes learning (and undergoes change) precisely *because* it is messy, confusing, and conflict-ridden. Problems that once looked simple ("There is too much pollution") and policies that once sounded straightforward ("We'll tell people to stop polluting") must often be tempered and modified once they are tested by the complexities of reality.

★ The Results

Though Americans think that their environment has gotten worse, in fact many aspects of it have gotten better since 1970. There is now much less carbon monoxide, sulfur dioxide, and lead in the atmosphere than once was the case. It is less clear whether there have been equally noticeable improvements in water quality, in large part because much of the gunk that flows into our rivers, lakes, and oceans does not come from some fixed source (such as a sewer) that can be easily isolated; a lot comes from runoff from the ground as a result of rain washing pollutants off urban streets and farmlands and into the water.

Hazardous waste is found at thousands of known locations (and perhaps hundreds more unknown ones). The cleanup job is so great that it will be years before much progress can be shown. Getting big reductions in dangerous pesticides requires first reaching agreement on what is a dangerous pesticide and then finding a way of minimizing the harm to agriculture that would be caused by the reduction.

★ SUMMARY ★

Environmental issues illustrate all four styles of policy-making.

Entrepreneurial politics: an unorganized public is to benefit at the expense of a well-organized group. An example is the effort to reduce what some think is global warming. Such politics requires mobilizing the media, dramatizing the issue, and convincing members of Congress that their political reputations will suffer if they do not cast the right vote. To prevent client groups from taking over the implementation of these laws, the bills are written to make it easy to use the courts to force action.

Majoritarian politics: an unorganized public is to benefit at its own expense. Examples include reducing auto emissions by imposing transportation controls, raising gasoline taxes, and requiring environmental impact statements. Interest groups tend not to be the decisive players. Whether the proposal wins or loses depends on how the public generally evaluates the costs. They like environmental impact statements but oppose higher gasoline taxes and restrictions on private automobile use. Dramatizing a crisis tends to be less effective because the public at large, and not some small interest, must pay for any benefits.

Interest group politics: two organized groups with a material stake in the outcome fight over who will pay

and who will benefit. An example is the controlling of acid rain. When faced with two or more powerful interests, Congress tends not to pass broad, sweeping bills but to find workable compromises.

Client politics: an organized group gets a benefit; an unorganized public must pay. Examples include the use of agricultural pesticides and timber cutting in U.S. forests. Client politics depends on the client group's having strategically placed allies in Congress and on its potential opponents' being unable to convert this policy system into a pattern of entrepreneurial politics (by dramatizing a crisis, for example).

In general, entrepreneurial politics has played the dominant role in most environmental issues. The prevalence of entrepreneurial politics in this arena is largely due to (1) the success of policy entrepreneurs in sensitizing public opinion to these matters and (2) the growth of a variety of public-interest lobbies with close ties to the media and with the ability to threaten recalcitrant legislators with attacks on their reputations.

Unlike economic or welfare issues, environmental issues lend themselves to entrepreneurial politics because the problems can be portrayed in life-threatening terms, the goals can be related to what most people believe is the good life, and the costs can be minimized, deferred, or (seemingly) placed on small groups.

RECONSIDERING WHO GOVERNS?

1. Why have environmental issues become so important in American politics and policy-making? Today almost everybody loves the environment and thinks government has a duty to protect and improve it. Despite post-1970 improvements in many environmental conditions, most people think the environment is getting worse, not better, and worry about acute environmental threats to public health and safety. Many environmental issues, including such major concerns as global warming, are enmeshed in scientific uncertainty. Nevertheless, environmental issues have attracted the interest and energy of talented policy entrepreneurs. These issues figure prominently not only in Washington politics, but also at the state and local levels as well as in international relations.

2. Does the public get the environmental laws it wants?

Yes and no. Most people say that they want the government to do whatever it takes to protect and improve the environment, and most support laws and regulations that force particular industries to reduce pollution or take other pro-environment actions at their own expense. Many such laws and regulations have been enacted and enforced since the early 1970s. But most people waver when it comes to laws and regulations that would impose substantial financial costs on them (substantially higher gasoline taxes, for example) or force them to change how they live (prohibiting them from driving their cars to work, for instance). Typically, politicians echo the public's pro-environment sentiments without, however, enacting policies or enforcing regulations that impose large and visible costs on most people.

RECONSIDERING TO WHAT ENDS?

1. If we wish to have cleaner air and water, how far should we go in making them cleaner when the cost of each additional gain goes up?

Not as far as some people would like. We have cut the pollutants coming out of cars dramatically, but it will cost a lot to cut them to zero. The key question is whether spending scarce dollars that way makes more sense than spending the same amount of money on something else, like preventing diseases or funding schools. Choosing between spending money on clean air, less disease, and better schools may strike some readers as wrongheaded; shouldn't we have all of these? But governing means using limited resources to deal with many different desires. It is almost impossible to have air that is entirely clean (natural fires and dust storms will make it dirty), and even reducing auto pollutants to zero will have to await the invention of engines powered by things like fuel cells that have as a waste product only water. If we spend huge sums on making air or water entirely pure, we will inevitably be spending less on something else that we also want. Americans love the environment, but even for things we love we have to worry about costs.

2. What is the best way for the government to achieve an environmental goal: by issuing orders or offering incentives?

For a lot of people, issuing orders makes sense. That way we tell people what they have to do and can punish them if they don't do it. But for most economists and policy analysts, incentives make more sense because they give people the opportunity to choose the most efficient way to help the environment. For example, we can tell utilities not to let any sulphur dioxide out of their smokestacks, but that may impose huge costs on utilities that already produce very little sulphur dioxide or even drive them out of business. If instead we tell utilities they will get rewards for reducing pollutants, those that can do so easily will make big changes and, if they reduce them by more than a specified amount, will be allowed to sell the extra gains to another company to help it meet its goals. Still, when the gains are huge and the costs minimal, issuing orders makes sense.

WORLD WIDE WEB RESOURCES

Environmental Protection Agency: www.epa.gov Environmental activists Environmental Defense: www.edf.org Natural Resources Defense Council: www.nrdc.org Sierra Club: www.sierraclub.org Environmental skeptics American Enterprise Institute: www.aei.org Competitive Enterprise Institute: www.cei.org

SUGGESTED READINGS

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