

The Political Economy of Environmental Regulation

12

12.1 Introduction

In 1970, the U.S. Congress passed the Clean Air Act, declaring it the law of the land that the air breathed by Americans should provide “an adequate margin of safety . . . requisite to protect the public health.” Yet, now in the 21st century, some tens of millions of people in the United States are still exposed on occasion to ground-level ozone (smog) concentrations considered dangerous; air toxic emissions at some industrial facilities still remained high enough to impose cancer risks greater than 1 in 1,000 to surrounding residents.

Is this evidence of government failure? Some would turn these figures around, saying instead, “look how far we have come.” Many cities now meet the ozone standard that didn’t in 1970; more significantly, consider how many *would* be failing today if we had not taken the measures we have. In the next few chapters, we will look in more detail at the overall impact of regulation, which can be viewed as a glass half-empty or half-full. However, many would still argue that 50 plus years is a long time to wait for a law to be enforced.

What lies behind this slow progress? Scientific uncertainty as to an “adequate margin of safety”? High compliance costs? Other priority areas for the Environmental Protection Agency (EPA)? Insufficient funds allocated to the EPA by Congress? Industry influence over legislators and regulators? Or more fundamentally, a recent shift away from a bipartisan consensus around the need for science-based regulation? All of these factors have played a role. The point here, however, is simply to illustrate that passing a law is only the first step in the long process of changing market behavior.

Economists have identified two main obstacles that stand in the way of effective government action to control pollution. The first is the highly **imperfect information** that regulators possess. To begin with, regulators are never given a clear-cut goal. For most pollutants, it is difficult, if not impossible, to define “safe” emission levels in purely scientific terms. Thus, a political definition of safety, based on technical information, must be worked out. More generally, the available risk assessments give only rough, if any, indications of health risks, and cost estimates can be equally unreliable. Moreover, regulators must often turn for information to the very sources they seek to regulate. Thus, as we shall see, many economists have focused on improving regulators’ access to information as a crucial strategy for improving regulation.

However, ultimate uncertainty about the “facts” means that any decision to promote safety or efficiency, while informed by the technical merits of the case, will also leave substantial room for bureaucratic discretion, aka “wobble room.” With the opportunity for discretion comes the opportunity for **political influence**. Government officials clearly have motivations other than fulfilling the letter of the law: these include career building or satisfying ideological preferences, for example. Given the existence of bureaucratic discretion, industry and environmental groups deploy substantial resources to affect elections, government legislation, and regulatory decisions.

While political influence has always been a factor in implementing U.S. environmental law, until recently, a key foundation protecting it from excessive political intervention has been strong bipartisan support for environmental action. Throughout the 1970s and into the mid-2000s, at both the leadership level and the grassroots, both political parties contained substantial numbers of self-identified environmentalists. As late as the 2008 election, the leading Republican Presidential candidates were strong supporters of climate change legislation. However, environmental bipartisanship in U.S. politics began to erode in the 1990s, and by 2016 when Donald Trump was elected President, efforts to implement and enforce existing environmental laws—and action on climate change in particular—had become highly partisan and divisive issues. Trump’s election ushered in a new era in U.S. environmental policy, which we will discuss in detail below.

This chapter begins by detailing the generic process of environmental regulation and then goes on to explore, in some detail, the obstacles presented by poor information and political influence. We focus particular attention on the fundamental change in direction of U.S. environmental policy following the Presidential election of 2016. Finally, we briefly consider what lessons the disastrous environmental policies followed by the former Soviet Union hold for Western market-oriented democracies. Chapter 13 then turns to a more detailed overview of the major environmental laws now in effect.

12.2 The Process of Environmental Regulation

Today, the level of ozone concentration in the air (known as the ambient pollution level) officially designated by the government as providing an “adequate margin of safety” is 0.08 parts per million (ppm). Where did this particular environmental regulation, and thousands of others similar to it, come from? The history of a regulation such as ozone control is a three-step process.

Step 1. U.S. Congress Passes Bill

Of course, step 1 doesn’t come out of nowhere. First, there must be a generally perceived environmental problem. Next, some enterprising congressperson or congressional aide decides to make the problem a top issue. Then, legislation is drafted, and industry and environmental lobbyists line up support for and against and try to insert friendly amendments. Finally, legislation is passed, and the president signs on.

Even though this first step takes several years, the legislation is usually not very specific. Because of compromises struck between various parties, the language of the bill is often purposefully vague or even contradictory. All this leads to step 2.

Step 2. EPA Drafts Regulations

Congress usually delegates to the EPA the hard work of figuring out the exact meanings of terms such as *safety*, *prudent*, and *reasonable balance*. The EPA tries to translate the bill’s language into actual regulations, specifying allowable levels of emissions or of ambient pollution.

As we saw in Chapter 4, the process of creating a major new regulation requires the EPA to generate a regulatory impact analysis, a technical document that includes extensive documentation of both the scientific basis for its decision and its likely economic impact, including compliance costs. Yet, the EPA most often has only limited information about the environmental impacts of pollutants and the technologies available for their control. Thus, during the process of drafting regulations, the agency asks for comments from industry and environmental groups. Before the regulations can become law, they must also officially go through several rounds of public

comment, to which the agency is legally required to respond. Thus, interest groups are formally incorporated in the decision-making process.

Part of this is self-defense on the EPA's part—many decisions the agency makes are appealed, or one side or the other will sue. Former EPA administrator William Ruckelshaus estimated that 80 percent of the EPA's rules were subsequently challenged in court.¹ For example, in the late 1970s, the ozone standard mentioned previously was revised upward from 0.08 to 0.12 ppm under the threat of industry lawsuits, and this revision itself was challenged in court by both industry and environmentalists. In 1997, after again being sued by environmentalists and in the light of new scientific evidence, the EPA tightened the standard back to the original 0.08 ppm.

This information-gathering and public-comment phase can take a couple of years when it proceeds smoothly. Generally, however, Congress fails to appropriate enough money for the EPA to do all its tasks, and certain regulations are moved to the back burner, where they may languish for years. Finally, as EPA does get close to finalizing its regulations, the President's staff in the Office of Management and Budget (OMB) reviews the new regulation and may send it back to the EPA with recommended revisions.

Typically, the EPA regulations provide general guidelines for industries and municipalities to follow. However, the implementation details are left to step 3.

Step 3. State Governments Implement and Enforce Regulations

The EPA often requires state governments to submit plans detailing how they intend to achieve the agency's goals. In the ozone case, for example, the state agency would need to tell the EPA what measures it intended to take to control emissions from vehicle tailpipes and stationary sources such as petroleum refineries in order to come into compliance with the 0.08-ppm ambient air standard. Failure to do so would theoretically result in the EPA mandating certain measures, although it might just result in more delay. Thus, the hard economic choices are often left to state officials. Enforcement, too, is primarily a state function, although the EPA does have its own enforcement division to supplement state efforts.

There are three major points to be taken from this brief review of the legal process. First, even when it operates on schedule, drafting regulations is a cumbersome and time-consuming process. Because information about benefits and costs is highly imperfect and not widely available, legislators and regulators have provided many opportunities for affected parties to explain their positions.

In this process, the United States has adopted a **judicial model of regulation**. The EPA is expected to adhere to strict procedural guidelines for accepting and addressing comments and must build a quasi-legal case for each major regulation it issues. Even under ideal circumstances, regulators gather their information in a forum where both sides are doing their best to obscure, rather than clarify, the underlying issues. This process tends to exaggerate the differences over scientific and economic issues rather than generate a consensus position the agency can accept as the "truth."

Moreover, those interested in stalling regulations have ample opportunity to do so merely by flooding regulators with extraneous information. For example, several feet of shelf space was required to hold more than 1,200 comments, all of which required responses, that the EPA received on a single proposal.² "Paralysis by analysis" is a frequent outcome.

Finally, the regulatory process can be influenced at dozens of points. Here is only a partial list of opportunities for interested parties to shape the final outcome: drafting of initial laws or

¹From Bryner (1987, 117).

²From Jenkins et al. (2009).

insertion of amendments; discussions with high EPA officials or mid-level technicians involved in the agency's day-to-day work; formal and informal public comments; limiting or enlarging the budget that Congress and state legislators provide for regulatory agencies to do their work; meeting with the president's oversight agency in the OMB; influencing state implementation plans and state enforcement mechanisms; suing in court for changes once regulations have finally been put into place; and, finally, bargaining with enforcement officials over compliance.

Given the complex nature of the regulatory task, regulators *must* turn to industry and private groups for information about the potential benefits and costs of regulation. Moreover, because Congress itself has no way of knowing whether the EPA is making wise decisions, following our familiar system of checks and balances, the regulatory process itself has been consciously opened up to all interested parties. A complex, legally binding decision-making process (the judicial model) has been put in place to prevent abuse of power by regulatory bureaucrats. Yet, the politics of information gathering itself has often yielded regulatory gridlock.

12.3 Regulation under Imperfect Information

The EPA was founded in 1970 as an independent agency within the executive branch of government. It now employs more than 17,000 people in 10 regional offices and Washington, DC, and has an annual budget of more than \$7 billion. The agency is required to develop, implement, and enforce regulations under dozens of different laws. The EPA has many ongoing projects and responsibilities, including the regulation of tens of thousands of water pollution sources and hazardous waste dumps, hundreds of thousands of stationary air pollution sources, millions of automobiles, and hundreds of new chemicals and pesticides introduced each year.

To accomplish these tasks, the EPA is obviously provided only limited resources. Thus, the agency has to determine priorities—not all of its regulatory functions can be adequately performed without spreading personnel too thin. As a result, in virtually all of its decisions, the agency gathers or generates less than full information about the problem before acting.

The extent of this information gap was revealed by a joint EPA–Amoco study of benzene air pollution at an Amoco oil refinery in Virginia. The agency had issued regulations to control benzene emissions from wastewater ponds at refineries. These regulations, based on research done in 1959, proved dramatically far off base. When the joint study project was completed, ponds were discovered to be polluting at a level 20 times lower than that predicted. The real benzene pollution problem arose on the loading docks, where fuel was pumped into barges.

Amoco eventually constructed a \$41 million treatment system to deal with pollution from the ponds. Meanwhile, much more extensive pollution from the loading docks, which could have been controlled for \$6 million, went unregulated and unabated.³ How could such a situation develop? In general, before writing a regulation, the EPA has neither the staff nor the legal right to conduct the kind of intensive examination of an industrial facility that it eventually did in the Amoco case. Usually, the agency can sponsor only limited research of its own; as a result, it must turn to industry, environmental groups, or university researchers for much of its data.

In addition to relying on outdated or poor information, the EPA must contend with a **reporting bias** when it turns to industry for information about compliance costs. To illustrate the problem, suppose the EPA seeks to regulate a pesticide thought to contaminate groundwater. The agency is considering a ban on the use of a pesticide in high-risk counties. As discussed in the next chapter, pesticides are regulated under an efficiency standard—Congress has directed the EPA to weigh benefits against costs in this case. Figure 12.1 illustrates our efficiency standard diagram.

The true marginal benefits and costs of the ban are reflected by the curves labeled MB and MC. If the EPA had access to this information, efficiency would require a ban applying to A^* acres.

³See “What Really Pollutes?” (1993).

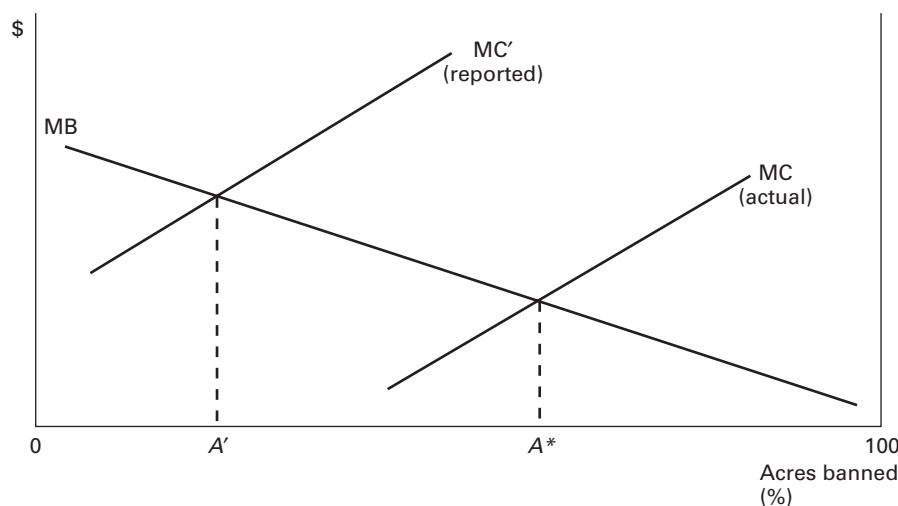


FIGURE 12.1 Regulation with Imperfect Information

However, suppose the EPA must rely on agrichemical company sources for information about how much it will cost farmers to switch over to alternative pest-control methods. Industry has a clear incentive to lie and overstate the cost (MC'). If the industry does so, and the EPA uses the industry estimates, the agency will ban A' acres, an inefficiently low number.

There are two responses to reporting bias. The first is to improve the **in-house analytic capability** of the agency. While the EPA will never have the resources to fund all the research it needs, concentrating on training and retaining technical personnel is a basic aspect of improved regulation. However, political developments can work against this goal. For example, following the general trend toward privatization of services, much of the EPA's technical work has been contracted out to private consulting firms. The ostensible motive was to save money (a goal that, in fact, has often proved elusive), but the net result was to reduce the agency's technical capabilities. Reliance on contractors reached the point, according to some critics, that the agency could not even evaluate whether contract work was being performed well. Moreover, many of the consulting firms also depend for their livelihoods on contracts from industries regulated by the EPA. Reducing outside contracting would help build up the EPA's technical expertise and reduce conflicts of interest.

The second approach to the information problem is to rely on the so-called incentive-compatible regulation. Regulation designed to elicit truthful information is called incentive-compatible because the *incentive* for the regulated party is *compatible* with the regulatory goal. Using the mix of tools at their command, regulators can, in fact, do better than is illustrated in Figure 12.1. As we discuss more fully in Appendix 15B, it turns out that if regulators were to control pesticide use by taxing rather than banning it, then firms would have an incentive to *understate* rather than overstate their control costs. In Appendix 15B, we also find that an appropriate mix of taxes and marketable permit systems (discussed more fully in Chapters 15 and 16) can help provide just the right incentives for truth telling.

12.4 Bureaucratic Discretion and Political Influence

Regardless of the degree to which the EPA is able to hone its information-gathering and evaluation abilities, regulatory issues will never be resolved in a clear-cut manner. The ambiguous and often contradictory goals provided by Congress, as well as the underlying uncertainty in scientific

and economic analyses, ensure that bureaucrats will retain substantial **discretion** in regulatory decision-making. Because regulatory decisions impose costs on affected industries, businesses will devote resources to influence the discretion that regulators exercise (in ethical, questionably ethical, and unethical manners) just as they devote resources to minimizing labor or energy costs.

In addition, simply because a business lobbies for regulatory relief does not mean that the relief is unjustified. It remains true that industry has the best knowledge about the likely impact of regulation and that bureaucrats have the power to arbitrarily impose substantial burdens on firms for reasons that are not obvious. Thus, the ability of industry (and environmental groups) to lobby regulators is not necessarily a bad thing. The problem is that legitimate access can become transformed into undue influence. This section considers factors that motivate bureaucrats to stray from “doing their job.”

Environmental regulators are expected by the public to pursue their congressionally mandated goals of efficiency or safety in pollution control. However, similarly to all other people, they have personal interests to consider. To the extent of their ability, bureaucrats are likely to use their positions to satisfy three types of goals: agency building, external career building, and job satisfaction.

Many observers of bureaucracy (both governmental and corporate) have argued that a primary goal of managers is **agency growth**. Protecting and enlarging the agency budget, of course, can make the agency more effective in doing its primary job, but it also provides more perquisites (new computers, travel, opportunities for promotion, etc.) and prestige for agency personnel. A bias toward unwarranted growth may lead to “overregulation” (especially from an efficiency point of view) as the agency personnel engage in new activities to justify greater funding. On the other hand, it may just lead to wasted money.

The second factor that regulators keep in mind is **external career building**. I (Eban) once interviewed for a job in the Antitrust Division of the U.S. Justice Department. The typical career track, I was told, involved working at Justice for 5 years, at which point one’s salary topped out. Most people then went on to work for law firms or economic consulting firms that *defended* companies from antitrust suits. This so-called revolving door between industry and its regulators is widespread. EPA employees need to keep in mind future career options when making tough regulatory decisions.

Although there are some jobs in environmental organizations or academic institutions, most private-sector jobs for people with experience in the EPA, and virtually all the high-paying ones, are in private industry. Thus, the potential for conflict of interest clearly exists. More significantly, in the struggle to define exactly what the public interest really is, top policymakers are often clearly aware of the industry position as they are on intimate terms with many from that side of the aisle. They may be less aware of what it is like to live next to a hazardous waste dump.

This leads us to the third bureaucratic motivation that might influence regulatory policy: **job satisfaction**. Are bureaucrats likely to use their discretion to draft and enforce aggressive or meek laws? Three factors come to play here: **ideology**, **power**, and the **quiet life**. First, regulators with either an environmental or a free-market ideological bent may satisfy their own personal preferences for more or less regulation. Second, regulators may impose harsh restrictions on industry because it provides them with power and authority. Conservatives have often charged that the EPA is staffed by power-hungry environmental zealots. And on the face of it, it seems more likely that persons attracted to a job in the EPA would be sympathetic to environmental concerns.

Yet, the political appointees who run the EPA are more likely to come through the revolving door from industry and to share a deregulatory philosophy, especially if appointed by a conservative president. Prior to the Trump administration, one of the most jaw-dropping examples of bureaucratic discretion was the decision during the George W. Bush years to allow the widespread practice of “mountaintop removal” to mine coal in Appalachia. In this practice, companies literally blow the tops off of mountains to get at the underlying coal. They then dump the debris in

the surrounding areas, including on top of streams. Over the last two decades, close to a thousand miles of streams in Appalachia have been buried by mine waste.

Mountaintop removal clearly runs counter to a regulatory mandate in 1983 that required mining companies to avoid mining activities within 100 feet of a stream, and it also appears to be a clear violation of Clean Water Act statutes that require protecting surface-water quality. But, exercising their bureaucratic discretion, both the Office of Surface Mining and the Army Corps of Engineers regularly provided permits for the dumping of mine waste, especially from 2000 to 2008. For much of this time, the permitting process was overseen by a former coal-industry lobbyist who had been appointed to the job by President Bush.⁴

One final factor that probably helped this process along is the desire on the part of agency personnel for “a quiet life.” The road to advancement within a bureaucracy is often to avoid antagonizing outside interests and to proceed with caution when doing so. The outcome is an emphasis on procedure over substance. This generates a substantial bias toward the status quo. One former EPA employee maintains that EPA officials are more interested in keeping their heads low than in sticking their necks out. Because industry is highly concerned with the process of drafting the details of regulations, mid-level bureaucrats often find themselves in day-to-day contact with industry officials. Here, “in addition to real and hinted at job opportunities,” EPA officials become aware that “people who cooperate with the lobbyists find that the lobbyist will lobby for their advancement with upper management. Those who don’t cooperate will find the lobbyists lobbying for their heads.”⁵

This section has identified three potential goals beyond their legislative mandate that bureaucrats might pursue: agency growth, external career building, and job satisfaction. Growth suggests, if anything, a tendency toward overregulation; career building would lead to underregulation; and job satisfaction might generate either. As a result, it is not possible to identify an a priori bureaucratic bias. However, it is worth keeping in mind that bureaucrats are people too. Similarly to anyone else, they take pride in a job well done—serving the public interest as they see it.

12.5 The Influence Game: Pre-2016

As noted in the introduction to this chapter, the election of President Trump in 2016 brought an official end to a 50-year period marked by strong bipartisanship on environmental policy. It was true that Republicans in this earlier period tended to be more “pro-business” and Democrats more “pro-environment.” But the existence of many self-identified Republican environmentalists meant that battles over new environmental laws, and the enforcement of existing ones, were fought on a bipartisan foundation. Legislators on both sides of the aisle in Washington (enough of them) agreed in principle that the government had an important role to play in protecting the environment, and that science-based regulation that weighed risks and benefits should be the foundation for such actions. For reasons we discuss in the next section, this political agreement is now gone, and under Trump, U.S. environmental policy has taken a dramatically different turn. Before that, we will explore here how political influence has played out in the past, during the era of bipartisan consensus. Under those conditions, who was winning the influence game?

The answer to this question, of course, depends on whom you ask. Environmentalists would point to almost 50 years of delay in enforcing the Clean Air Act; industry would respond that the laws themselves make unrealistic demands. Rather than answer this question outright, we can identify the resources available to the two sides and the arenas in which the parties tend to prevail.

⁴Broder (2007).

⁵Quote is from Sanjour (1992, 9).

The two types of resources in the political world are **votes** and **dollars**. In general, environmentalists are better at marshaling voting support, while industry has greater monetary resources at its command. Tough environmental laws command broad public support in the polls, even when the opportunity cost of higher prices is explicitly factored in. Thus, environmentalists have a large natural political constituency. Moreover, among the public, environmentalists are a more trusted source of information about environmental issues compared to either industry or government officials.

This advantage is translated into influence in the crafting of national environmental protection legislation and regulations. Ten major national environmental organizations (Sierra Club, National Wildlife Federation, National Audubon Society, Environmental Defense Fund, Natural Resources Defense Council, Wilderness Society, Nature Conservancy, Greenpeace, Ducks Unlimited, and World Wildlife Fund) represent over 10 million members. These groups hire experts to analyze the benefits and costs of new policies, lobbyists to spread this information and promote environmental legislation, and lawyers to sue government agencies. The combined annual policy analysis, lobbying, and legal budgets of these groups runs into tens of millions of dollars—a substantial sum, but much less than the resources that industry can bring to bear. However, environmental dollars often have greater leverage among many legislators due to the votes they represent as well as to a higher perceived level of credibility.

It is fair to say that in the past, environmentalists won substantial gains in drafting and passing national environmental protection laws. This was reflected in the general tendency of environmental law to set safety rather than efficiency standards for pollution control as well as in the passage of substantial environmental legislation under Republican Presidents Bush (senior) and Reagan.

Due to their ability to mobilize voters, grassroots environmental movements have also done well at the local level, particularly in blocking the siting of new facilities (power plants, landfills, incinerators) and, in some cases, promoting alternatives such as recycling. Environmentalists have also had some success leveraging their voting power at the state level (California, New York) but have faced severe challenges in the states traditionally dominated by particular industries (Louisiana, oil, gas, and chemicals; and Kentucky, coal).

This dynamic has been evident in national fights over climate legislation. Between 2000 and 2016, one study found that the fossil-fuel industry spent over \$2 billion on lobbying, outspending climate action advocates 10 to 1. An example: seven key Democratic lawmakers on the House committee deciding the initial shape of the legislation each received more than \$100,000 from oil and gas, coal, and electricity companies during the 2008 election cycle.⁶

Besides the fossil-fuel industry, a few of the dozens of other major industry trade groups with a strong lobbying presence in Washington include the Chemical Manufacturers Association, the Fertilizer Institute, the American Paper Institute, and the Chlorine Institute. In addition, most of the large chemical, petroleum, and manufacturing firms maintain their own Washington staffs and/or hire DC law firms to lobby on their behalf.

Dollars can be used to buy a number of things useful for influencing the regulatory debate: technical studies, lobbying staff, the promise of future jobs, access to legislators and regulators, and votes (through advertising).

As we have stressed, control over information is a crucial aspect of regulation. Thus, the ability to hire “experts” to conduct **technical studies** of benefits and costs is an important channel of influence. A good example was the “full court press” launched by industry against the EPA’s proposed technological standard for injection of hazardous wastes into deep wells. The Chemical Manufacturers Association, along with many of its members—Monsanto, CYRO Industries, Dow, DuPont, BP Chemicals, Celanese, Cynamid, and ARCO—met repeatedly with mid-level

⁶Brulle (2018) and Goldenberg (2009).

EPA officials, providing them with data about the cost of the new proposals as well as warnings of plant shutdowns. Some of the lobbyists threatened political repercussions if the agency did not respond. According to one EPA official, “We were attacked on a technical basis—the kind of case they felt they could make in a lawsuit if we didn’t yield. Industry argued there would be huge costs if we went forward with the proposed rule. Depending on who you listened to, it was the end of the world.”

The EPA’s final rule was ultimately watered down substantially. The point here is not whether the company’s claims were correct, which they may have been. Rather, in the information war surrounding the impact of the regulation, environmentalists did not have the resources to bring much expert testimony to bear. Moreover, even if they had access to information about costs, environmental groups did not have the **staff** capacity of the chemical companies. Dozens of industry lobbyists repeatedly delivered the same message to mid-level EPA officials, as well as to presidential staff. In this particular case, there is evidence that pressure from a close presidential adviser influenced the final EPA decision.⁷

Money buys information, lobbying and legal staff, and **access** to politicians and regulators. Out-and-out bribery—I’ll contribute \$5,000 to your campaign if you vote against bill X—is not common in the United States, though it is not unknown. Instead, the more money one contributes to a political campaign (or party), the more often one gets to meet with the politician or his or her appointees at the EPA to make one’s case known. In an information war, where all sides can make a “reasonable” case on the surface, access is easily translated into influence.

Since the early 1990s, with declining bipartisan support for environmental action, industry has been able to translate its dollar advantage into fighting off any major new U.S. environmental legislation. In addition, it has been effective in using its resources to dilute the impact of these laws. Through the revolving door of domination of information generation and delivery, large legal staffs, and superior access to politicians and political appointees, industry probably wins more often than it loses in all of the steps subsequent to the passage of laws. From the public-comment phase in the drafting of regulations by the EPA, through the implementation and enforcement of these laws by state officials, through the budgeting of resources to these agencies, through the opportunity for court challenges, and through bargaining over and compliance, industry has many opportunities to influence how the ultimate regulatory process will work.

Washington lawyer Lloyd Cutler, whose firm has represented many corporate clients, put it this way: “It would be wrong to think that corporations are on top or ahead. They feel very put upon or defeated. It’s true that they manage to survive and deal and push things off—they feel the added costs of regulation exceed the benefits (editor’s note: an efficiency perspective!)—but they would say the notion that they now control or dominate the health and safety agencies is just crazy.” Still, Cutler explained, “It’s harder to pass a law than to stop one. On the whole, I would say the professional lobbyists and lawyers prefer to live in this world where there are so many buttons to push, so many other places to go if you lose your fight.”⁸

This world of insider politics is frustrating for citizens, and motivates calls to “drain the swamp.” Lobbying to gain influence is a form of the positional competition discussed in the previous chapter. In such a zero-sum, or negative-sum, game, the gains of one party can come only at the expense of another. Under these circumstances, a natural tendency is to overinvest resources in unproductive competition. This situation can be analyzed through the prisoner’s dilemma model, last seen in our Chapter 11 discussion of the rat race. Figure 12.2 illustrates the situation in a hypothetical regulatory decision about an emissions standard.

Each side must decide how many lobbyists to deploy. If neither group lobbies, then a standard of 4 ppm will be set. Note that an identical result will occur if both sides send a lobbyist—the

⁷ See Greider (1990, 138–40).

⁸ From Greider (1990, 134).

		Environmentalists	
		Don't lobby	Lobby
Industry	Don't lobby	4 ppm	2 ppm
	Lobby	6 ppm	4 ppm

FIGURE 12.2 A Zero-sum Lobbying Competition

extra efforts cancel one another out. If environmentalists don't lobby and industry does, then a loose standard of 6 ppm will result. If, on the other hand, industry doesn't lobby and environmentalists do, a strict standard of 2 ppm will emerge.

What is the likely outcome of this kind of setup? If there is no agreement to restrict lobbying, environmentalists must assume that industry will lobby (and vice versa for industry). Thus, each side will choose a lobbying strategy for defensive purposes, even though the same outcome could be achieved at lower cost. Moreover, the process is likely to escalate into a full-blown "lobby race" as each side tries to forestall the other from gaining an advantage.

An agreement to limit lobbying seems in the interests of both parties. If cheating on such an agreement were easily observable, the agreement would be self-enforcing: if industry observed environmentalists cheating, it could simply retaliate by sending in its own lobbyist. However, if cheating is not easily detectable, as is the case in lobbying, the agreement will break down as each side cheats to protect itself from the possibility that the other will cheat!

The prisoner's dilemma model implies that cooperation rather than competition might be in everyone's best interest. How might this insight actually be applied in the regulatory arena? Is it possible to drain the swamp? A straightforward economic response would be to raise the cost of lobbying by eliminating the status that it now holds as a tax-deductible business expense. Sunshine laws that require public notice of meetings can help increase transparency, as well as restrictions on the revolving door that place a time limit on how soon after leaving office government officials can lobby for the industries they formerly regulated.

This was the state of environmental politics pre-2016: very much an insider game, as lobbyists from both sides sought to influence technical decisions made by EPA staff. However, under President Trump post-2016, the rules shifted dramatically: influence moved from behind-the-scenes to front-and-center, as industry leaders were appointed across-the-board to head the regulatory agencies themselves.

12.6 The End of the Bipartisan Consensus

Since the early 1970s, poll takers have been asking Americans whether government is in general doing too little to protect the environment. Answering "yes" to this question means that for the purposes of this chapter, you are an "environmentalist." Answering "no" means you are "industry friendly." And answering "the right amount" means that you are neither. In 2018, by this definition, 62 percent of Americans were environmentalists, 9 percent fell into the industry friendly category, and the remaining 29 percent were happy with the status quo (Newport 2018).

Figure 12.3 tracks the answers over time to two slightly different versions of this question, broken out by party affiliation. The top series shows that from 1974 to about 1986, while there were ups and downs, half or more of Republicans typically self-identified as environmentally concerned. During this period, Democrats were generally only 10 points higher in their "yes"

responses than were Republicans. In 1990, note something remarkable. Following the first 2 years of widespread media coverage of climate change, an astounding 75 percent of Democrats and 75 percent of Republicans were calling for stronger government action to protect the environment.

Following that high point, Republican environmentalism dropped back to around the 50-percent mark through the 2008 election, and after that fell markedly into the low 40s. Meanwhile, Democratic environmental concern after 1990 stayed high, in the 70-percent range. So, by 2010, what had been a steady average 10-point gap from 1974 through the mid-1990s had widened to 30 points.

The second series begins in 2000, with 44 percent self-identified Republican environmentalists. Ignoring a short bump-up in 2016, the Republican number falls to the low 30s, before taking a second dive after the Trump election. By 2019 (not shown), only 25 percent of Republican voters considered themselves environmentalists. The second series also shows Democratic environmentalism on the rise, from 66 percent at the end of the Clinton administration in 2000 to 86 percent in 2019. Note the increasing concern among Democrats about lack of government action during the Bush administration, a decline during the Obama years, and then the big surge following 2016. So, in this second series, what started as a 22-point gap between the parties in 2000 rises to a staggering 60-point division in 2019.

To summarize, we can see three periods in this data. From 1974 to about 1986, close to half of Republicans were self-identified environmentalists, with Democrats clocking in only 10 points

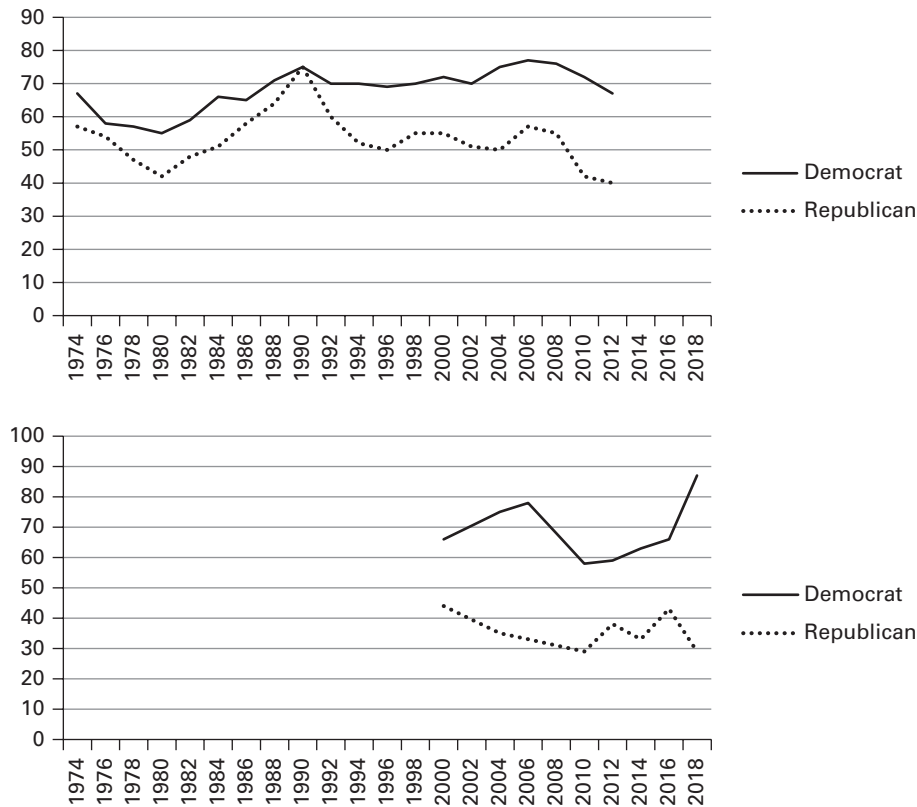


FIGURE 12.3 Is Government Doing Too Little on the Environment? (Percent “Yes”)

Sources: Top panel: McCright et al. (2014); bottom panel: Dunlap (2019).

higher. The “discovery” of climate change starting in 1988 drove Democratic concern up into mid-70-percent range, with Republicans following, but only for that one year of 1990.

It was this time frame from 1970 to 1992 during which all of our major environmental laws were passed—with most of them signed by Republican Presidents, Nixon, Reagan, and George H. W. Bush. At the conclusion of this initial period in 1992, the first President Bush’s team negotiated an international treaty on global warming called “The UN Framework Convention on Climate Change,” (UNFCCC) which was then ratified by the U.S. Senate 95-0. (More on this in Chapters 13 and 21.) Today it is hard to imagine any Republican Senator supporting such a treaty and surviving his or her next primary election. The UNFCCC was the last major piece of environmental legislation—almost 30 years ago now—passed by the U.S. Congress.

In the second period, from 1990 to 2008, Republican support fell back in the 50-percent range, but as the second series shows it was softening, while Democratic environmentalism stayed high. Mainstream Republican support for the bipartisan environmental consensus was evident as late as 2008, when the two final contenders for the Republican nomination for President had both been leaders in promoting climate legislation—Mitt Romney while Governor of Massachusetts, and John McCain in the U.S. Senate.

The third period begins with Obama’s election in 2008, after which Republican support for environmental protection collapsed. Particularly after the 2010 congressional elections brought in a new wave of politicians opposed to action on climate change and in favor of regulatory roll-backs, national Republicans faced very strong incentives to oppose any climate legislation. Indeed, Romney flipped on his climate position in order to win the Republican Presidential nomination in 2012. Since 2016, further polarization during the Trump administration has brought Republican support for action to protect the environment to a new low. Conversely, Trump’s election united almost all Democrats around a demand for greater action to protect the environment.

While public opinion has polarized, the division among elected politicians has become even more extreme. Note that today something like 25 to 35 percent of Republicans still say they want more government action to protect the environment. In particular, more than half of young Republicans (under 40) reported in 2019 that they were “very or extremely” concerned about their party’s position on climate change. But politicians must respond to activist voters in their “base.” Especially since 2010, Republican politicians in Washington who actively supported stronger environmental regulation or climate action have found themselves voted out of office through primary challenges from their right. And while groups of prominent Republican business people and economists continue to call for climate action, by 2016, of the 17 Republican candidates running for President, only one was in favor of climate legislation. Before and following the election, President Trump was highly vocal in his opposition, and in one of his first steps in office pulled the United States out of the Paris Climate Accord. All this has meant that for the last decade, and unlike the period prior to 2010, EPA officials working across a broad range of issues found that they had very little Republican “cover” if they sought to make decisions that industry might oppose.

What was the cause of the decline in bipartisanship? Put another way, why did the Republican base become so concerned with climate change that they would vote out politicians who sought to take action on the issue? On the face of it, as a scientific phenomenon, climate change is a strange basis for polarization. This is not a political science book, so we will offer only three suggestions.⁹ First, partially as a result of social media, nations across the world are finding their populations polarized across a broad range of issues. Technology has enabled the rise of highly partisan (and very successful) profit-seeking news media whose business models involve stoking passions, and who have developed vested interests in promoting polarizing political leaders.

⁹For a more detailed discussion, see Goodstein (2018). The extent of fossil-fuel industry and individual donations to the U.S. climate disinformation campaign are documented in Mayer (2016). Young Republican polling data is from Luntz (2019).

The second reason is money. The fossil-fuel industry, along with a number of U.S. billionaires, have together devoted hundreds of millions of dollars to frame global warming as a partisan issue. The motivation of the latter group was ideological: climate change action, they feared, would justify extensive government intervention in the economy (again, the threat of “ecosocialism”). These dollars were used to spread doubt about the scientific consensus around climate change, to attack individual Republican politicians who advocate climate action, and to donate to their primary opponents. The critical role of the fossil-fuel industry can be seen in the fact that in conservative parties around the Western world, only in the three countries where politics is dominated by oil and coal—the United States, Canada, and Australia—has skepticism of climate science been an official party position.

Finally, these attacks have been particularly effective as part of an “anti-elite” populism. During the 1960s, 1970s, and 1980s, environmental protection was plain “common-sense.” Air and water pollution, toxic waste dumps, and simple roadside litter were highly visible problems. By contrast, second-generation environmental challenges like climate change, species loss, and ocean acidification are complex and largely invisible. Right-wing populists have played off this complexity, and painted scientists and journalists who communicate about climate science as members of liberal “coastal elites” who are spreading fake news in order to alarm the public, sell media stories, and obtain research grants. Imagine that the “anti-vaxxer” movement—popular with some on the left—had hundreds of millions of dollars behind it used to attack mainstream science on this issue as cooked up by conservative “elite interests”. Democratic politicians would likely respond. In this way, one can see why ignoring or opposing scientific evidence of climate change has become the dominant position in the Republican party.

What does this new partisanship in both public opinion and leadership mean for U.S. environmental policy? Under the bipartisan consensus that held through 2016, the EPA was supposed to see itself, and to be seen by the public, as a non-partisan implementer of laws passed by congress. If directed by law to insure that the air Americans breathed was safe, or that the U.S. waters were “fishable and swimmable,” then that was its role. As noted above, due to imperfect information about the state of the environment, these tasks could be done only imperfectly, and were subject to lobbying and political influence by both industry and environmentalists. But both the Republican and Democratic establishments officially agreed that in principle, the EPA should rely on the best science and best economics to craft regulations that met the mandated legislative goals.

By contrast, the new view under President Trump is that in general, the EPA and other regulatory agencies have overreached in their mission. Scientists and economists are, according to this view, politically liberal and untrustworthy. In support of their own agendas, it is alleged, they have taken over the EPA to lead to regulation that goes beyond legislative intent. To correct for this perceived overregulation, the Trump-led response was a wholesale replacement of agency heads and advisors who have scientific and technical backgrounds with former industry officials and industry lobbyists. The mission of these individuals after 2016 was to lead an across-the-board rollback of regulations to levels that place less of a burden on industry.

The idea of **regulatory capture** was introduced in the early 1970s by Nobel-Prize-winning economist George Stigler. It refers to capture of an agency by the industry it was supposed to regulate: the “fox guarding the henhouse” phenomenon. Stigler (1971) used capture theory to argue that trucking and airline regulators at the time were benefitting their regulated industries rather than consumers. Stigler explained capture as a result of the fact that regulated industries had much to gain from cooperating to insure political control of the agencies. On the other hand, the general public who the agencies were supposed to serve were much less able to organize to defend their interests. The Trump administration’s across-the-board appointment of industry lobbyists and former executives to head the agencies appears to be a classic case of this fox-running-the-henhouse type of regulatory capture.

Consider the first 2 years of Trump's EPA. Appointed to head the agency was Scott Pruitt, who as Oklahoma Attorney General had 14 times sued the EPA to try and reduce the stringency of regulations. Among other Trump appointees were:

- Andrew Wheeler, EPA Deputy Administrator, a former coal industry lobbyist.
- Nancy Beck, Deputy Assistant administrator of EPA's Office of Chemical Safety and Pollution Prevention, formerly an executive at the American Chemistry Council.
- Erik Baptist, EPA Senior Deputy General Counsel, formerly senior counsel at the American Petroleum Institute.
- Samantha Dravis, Head, EPA Office of Policy, formerly attorney for an organization of conservative political donors led by billionaire brothers Charles G. and David H. Koch.

Within four months, Pruitt had moved to roll back 30 existing EPA regulations, bypassing much consultation with EPA technical staff. By June 2019, the number of rollbacks was up to 83. Pruitt also outsourced "the crucial work [of rewriting the regulations] to a network of lawyers, lobbyists and other allies especially . . . [through] the Republican Attorneys General Association. Since 2013, the group has collected \$4.2 million from fossil-fuel-related companies like Exxon Mobil, Koch Industries, Murray Energy and Southern Company." The rules being revised covered areas ranging from pesticides to wetland protection to chemical plants to climate change. Over the first six months Pruitt was in charge, enforcement efforts also plummeted with the EPA collecting 60 percent less in penalties imposed on polluters than under the same time periods for Presidents Obama or George W. Bush.

In the process Pruitt's schedule revealed that he met with industry representatives 25 times more frequently than with public interest or environmental groups. Dravis—one of Pruitt's appointees above—had *90 meetings* with industry interests during a nine-month period in 2017, while meeting with just one public interest organization. Pruitt also fired many members of the EPA's Science Advisory Boards. He prevented EPA-funded scientists (many of the experts in the relevant fields) from serving on those boards, and he also welcomed industry lobbyists onto the scientific advisory boards.¹⁰

The point here is not to argue whether President Trump's view that industry is generally overregulated relative to what the law requires is correct or not. On individual cases of environmental regulation, one can argue that EPA regulatory decisions may be right or may be wrong. Rather, it is critical to recognize that 2016 marked a watershed change in U.S. regulatory policy. Again, while there has always been something of a political seesaw—with Republicans appointing more industry-friendly agency heads while Democratic appointees were more environmentally connected—the United States has never before witnessed the level of industry occupation of high-level environmental agency positions seen after the 2016 election. Nor have we seen an attempt at this scale to roll back regulations across the board, through processes that disregard established scientific and economic expertise, and that exclude nonindustry actors in the process.

Will these regulatory rollbacks in fact be achieved? Much depends on the interpretation of the courts. Most of the Trump Administration efforts have been temporarily blocked by lawsuits, and it will be up to judges to decide if Trump officials acted within the law to reduce the stringency of the regulations. Here, President Trump's two Supreme Court picks, as well as the large number of Federal judges he has appointed—all sympathetic to the view that industry is overregulated—will matter. In the past, courts have often deferred to agency decisions on technical matters, but again, in the past, attempts to roll back regulations have been incremental not wholesale. We

¹⁰The previous three paragraphs were drawn from Dillon et al. (2018), Popovich et al. (2019), and Davenport (2017), the latter is the source of the quote.

will review some examples of the Trump administration regulatory rollback efforts in the next chapter. Much also depends on the outcome of the 2020 election, as well as the longer run evolution of the Republican view on environment and climate.

Should an “environmentalist” candidate win in 2020, then the EPA is likely to return in its operations to a more “normal” pre-2016 role, but will find it hard to advance tough regulations against a difficult backdrop of a highly partisan congress. If the Trump view prevails within the Republican party over the long run, then U.S. policy going forward is likely to see large-scale instability, with Democratic administrations pushing aggressive global warming pollution reduction and other environmental policies, and subsequent Republican administrations working just as hard for regulatory rollbacks. Because it is harder to build something up than to tear it down, the net effect of such a dynamic would likely be a loosening of the U.S. environmental regulatory framework.

An alternative possibility is that the acceleration of climate change impacts, combined with efforts by younger Republicans and other remaining environmental voices within the party, will revive the long-standing U.S. tradition of bipartisan support for environmental stewardship. Some have argued that the apparently deep partisan divide on the environment could reverse quickly. Prominent Republican pollster Frank Luntz (2019) has recently written that rising grassroots concern among Republican voters about climate change was creating an immediate imperative for Republican politicians to move back toward the center on the issue.

12.7 Better Information, More Democracy

In this chapter, we stressed how imperfect information can lead to wide bureaucratic discretion in drafting and enforcing the regulations that are in turn designed to put environmental laws into practice. Such imperfect information is what enabled the Trump Administration to argue in court that its regulatory rollbacks were nevertheless still consistent with congressional intent as expressed in, for example, the Clean Air or Clean Water Acts. More generally, it is hard for citizens to get data on the safety of their air and water, and so they rely on government agencies to collect this information. But what if government agencies themselves are corrupt or unaccountable?

The environmental consequences of limited information and lack of political accountability were made clear after the fall of the Berlin Wall in 1989, when the frightening conditions in the former Communist regimes became public. Driven to industrialize at all costs and despite official laws mandating strict environmental protection, officials in the state-owned industries proceeded to raise the level of poison in the land, water, and air to fatal degrees. Commenting on the widespread use of highly toxic pesticides such as DDT; the contamination and exhaustion of agricultural water resources; urban centers with air pollutants typically five times above legal levels; rivers and seas filled with untreated agricultural, industrial, and human waste; and death and disease from the Chernobyl nuclear accident and military nuclear wastes, one set of authors concluded: “When historians finally conduct an autopsy on the Soviet Union and Soviet Communism, they may reach the verdict of death by ecocide.”¹¹

What lessons can we learn from this story? Traditional conservatives have argued that the lesson is a simple one: “free-market economics, good; government involvement in the economy, bad.” Yet, with the Soviet model of a centrally planned economy discredited, the environmental problems the globe faces are now generated primarily by market economies and market-driven growth. Thus, the traditional conservative lesson provides us with only limited guidance. Clearly, governments can create environmental disasters that rival, if not exceed, those generated by private economic actors. Yet, in capitalist countries, government is *not* the primary source of environmental problems.

¹¹ From Feshbach and Friendly (1992, 1).

Instead, as both world population and economic activity continue to grow, the Soviet story is best viewed as a cautionary tale: without an *effective* governmental process forcing economic actors to pay for the externalities they impose on others, ecocide is a future that may await many countries, if not the entire globe. Most economic comparisons between communism and capitalism have focused on the market versus private ownership distinction. Yet, in capitalist countries, environmental degradation is the result of factors *external* to market transactions. A **demand for environmental protection** can often be expressed only through government action. Thus, the key issue is the responsiveness of the political system to this kind of demand.

Given this, the political distinction between Western countries and the former USSR—democracy versus totalitarianism—is more relevant to environmental concerns than the market versus state ownership distinction. When scientists or environmentalists in the Soviet Union attempted to bring information forward, they did so only at personal risk and generally found themselves cut off from any effective means of communication. Whenever economic decision-makers can insulate themselves from those exposed to pollution—through either control over information or suppression of dissent—externalities are unlikely to be accounted for by the political system.

For example, one need not look to the Soviet Union to find governmental abuses of the environment. Many of the worst hazardous waste sites in our country resulted from U.S. military programs, shrouded in Cold War secrecy. At the Hanford nuclear site in eastern Washington, for example, the U.S. Department of Energy has created a gargantuan waste problem, the extent of which is only now becoming clear after 50 years of tight information control. The cleanup at Hanford, if indeed it goes through, is expected to cost at least \$60 billion—more than the entire Superfund program directed at civilian dumps. In the United States, however, the potential for this kind of environmental abuse by the government has been largely reined in by mandated public scrutiny of major decisions: the environmental impact statement process described in Chapter 9.

Consider another example. Agricultural workers in many poor, market-oriented countries employ the same environmentally destructive agricultural techniques so decried in the Soviet Union. These include the widespread use of pesticides, such as DDT, that have been banned in developed countries. Farmworkers and their families who bear the brunt of the environmental costs in these countries have neither access to information about alternatives nor sufficient political power to challenge the marketing efforts of the firms that profit from the sale of these chemicals. (Indeed, farmworkers in our own country have much less influence over environmental policy than suburban professionals who provide the core support for major environmental groups.)

Both **access to information** and the practice of **effective and widespread democracy** are thus necessary ingredients for successful environmental policy. Without them, citizens cannot translate their demand for environmental protection into a reality. Absent substantial pressure from those affected, government will have neither the power nor the inclination to force economic decision-makers—whether state bureaucrats, managers of private corporations, or ordinary citizens—to internalize the external environmental costs generated by their actions.

Part IV of this book explores how this prescription of knowledge and power might be applied in poor countries to address problems ranging from population growth to conservation. Here, in the United States, a general trend toward accountability has been embodied in environmental law, ranging from the EIS to requirements for public hearings in the regulatory process to innovations such as the **Toxics Release Inventory**. In 1986, after a chemical factory in Bhopal, India, exploded, killing and maiming thousands, the U.S. Congress passed the Emergency Planning and Community Right-to-Know Act. The act required companies to publicly report on their releases of 450 chemicals suspected or known to be toxic, with many of them unregulated.

The Toxics Release Inventory provides self-reported data on chemical releases on a plant-by-plant basis across the country. This information is now on the Web at www.epa.gov/tri; you can go there and check out emissions from a plant in your neighborhood! The TRI has a variety

of goals, but an important one has been to make industry decision-makers more accountable to the communities in which they operate. The TRI has spawned a variety of community-based, nonregulatory efforts to reduce chemical emissions. It provides a good example of how expanded information and effective democracy can serve to internalize externalities associated with economic production.¹² (For more on the TRI, see Chapters 13 and 14.)

What, then, are the environmental lessons from communism? Given that government action is needed to force market actors to account for external costs, the experience of the former USSR teaches that “*unaccountable* government intervention is bad.” When government uses its authority to silence its critics or distort and control information flows, or when those on the receiving end of environmental externalities have little real power, government’s failure in the environmental arena is likely. Strict environmental laws, without a vigilant, informed citizenry, are hollow laws.

12.8 SUMMARY

This chapter has provided an introduction to the political economy of regulation. The regulatory process begins with national legislation. The EPA then translates the law into specific regulations. Finally, state governments implement and enforce the guidelines developed by the EPA. The United States has adopted a judicial model of regulation in which the EPA is required to go through a formal and elaborate process of information gathering and public hearings and must establish a quasi-legal basis for its major regulatory actions. The judicial model is designed to limit abuse of authority by regulatory bureaucrats but can be easily exploited to generate regulatory gridlock.

From an economic point of view, the primary obstacle to effective regulation is imperfect information. Regulators have only limited resources with which to gather information on the costs and benefits of a proposed rule and so must often turn to the very sources they regulate for information about the problem. This sets up a reporting bias problem: how can regulators be sure that the information they receive is correct? One way is to train and retain qualified technical personnel within the regulatory agency. Another way is to design regulatory policy to minimize incentives for distortion.

Regardless of how much good information the agency collects, however, bureaucrats are still left with substantial discretion in interpreting how environmental laws are to be implemented. Within the broad confines of a particular environmental law, should regulations be more strict or more lenient? Considerations of bureaucratic interests—agency building, personal career building, and job satisfaction—reveal no necessary bias toward over- or underregulation. Yet, discretion raises the problem of political influence.

Who wins and who loses in the influence game? Prior to 1992, due to their superior ability to mobilize votes in what was a bipartisan era, environmentalists made substantial gains in the U.S. national legislative arena. Since then, industry has successfully fought off any major new U.S. environmental laws. In crafting

regulations given their monetary and other resource advantages, industry has tended to come out ahead, but not always. The big loser from this adversarial structure is public faith in the rule of law. Public disenchantment with the EPA has become a serious problem as an effective and respected regulatory agency is the principal tool we now have for controlling market externalities. The prisoner’s dilemma model suggests that competition between environmentalists and industry to influence bureaucrats leads to an inefficiently high level of lobbying and lawsuits. Straightforward ways of reducing lobbying include eliminating its tax-exempt status, implementing sunshine laws, and limiting the ability of former government officials to lobby for interests they formerly regulated.

The 2016 election marked a sea change in the United States, away from a 45-year bipartisan consensus that an independent EPA, charged with employing the best science and best economic analysis could effectively develop and enforce regulations to carry out laws passed by Congress. Far beyond any past President, Trump staffed the EPA and other environmental agencies with former industry leaders and lobbyists from the very industries that the EPA is expected to regulate. He did so under the belief that U.S. industry was overregulated on almost every front, and the best way to pursue a broad rollback of regulations still consistent with the minimum legal requirements to protect the environment, would be to have former industry officials rewriting the rules.

Economists have developed Capture Theory to explain a situation in which industry interests gain control of the regulatory agencies charged with overseeing their activities. In the case of climate change, fossil-fuel interests spent hundreds of millions of dollars to help shift the Republican party away from its traditional bipartisan support of environmental stewardship to a position of public doubt around consensus climate science. Under President Trump, as examples, the initial appointments of Secretary of State, Secretary of Energy, and Director of the EPA all went to men with very close ties to the oil industry.

¹² See Fung and O’Rourke (2000).

The case of the former Soviet Union demonstrates an extreme situation of unaccountable government agencies failing to enforce national environmental laws. The relevant lesson from the former USSR is that a lack of effective democracy will doom well-meaning government environmental initiatives to failure. Economic decision-makers—whether state planners or private managers—will take external environmental costs into account (internalize them) only if those who bear the costs have the political power to force internalization. Nurturing effective democracy, in turn, requires both empowering citizens and providing access to information. The Toxics Release Inventory is a good example of this in the United States.

This chapter has focused on the obstacles that the information-intensive regulatory process has encountered in attempts to achieve its legislative target—efficiency, safety, or sustainability in pollution control. The election of President Trump, reflecting the steep decline of environmentalist voices within both the grassroots and the leadership of the Republican Party, opened a new chapter in this information war. The next few years may determine if the broad regulatory rollbacks pursued by the EPA from 2016 to 2020 will stand. If President Trump is reelected, the courts will decide: do agency bureaucrats have the legal discretion to reverse

dozens of established regulations, based on new, industry-friendly interpretations of the science and economics justifying those rules? If instead an “environmentalist” candidate wins in 2020, will his or her EPA reverse the Trump era roll-backs, and push the envelope of what existing legislation authorizes to try and regulate global warming pollution? More on this final question in the next chapter.

With the breakdown in bipartisanship, is there a way to achieve environmental protection that takes bureaucratic discretion away from EPA officials? Part III of this book focuses on economic reforms of the pollution control process that rely on economic incentives, requiring less information and fewer bureaucratic decisions. Chapters 15 and 16 explore one option: incentive-based regulatory approaches like pollution taxes and cap and trade systems. A second possibility is discussed in Chapters 17 through 19. Rather than reform the regulatory process itself, instead refocus government pollution-control policy on the promotion of clean technology, which reduces pollution in the first place. A final, and more optimistic, view is that, despite the many problems with the regulatory process, for many of the environmental challenges we face, it has worked surprisingly well. We will explore this line of argument in the next two chapters.

APPLICATION 12.1

Cooperative e Solutions?

To implement portions of the 1990 Clean Air Act, the EPA adopted a distinctly cooperative t approach—negotiating the regulatory details with representatives from industry, the states, and big environmental groups.¹³ Agreement was reached by representatives of these generally hostile groups on regulations designed to encourage the use of the so-called clean fuels. Industry benefited by having gasoline content standards set on an average basis rather than for every gallon of fuel. This provision substantially reduced the costs. Environmentalists won a favorable resolution of an ambiguity that Congress had left in the law about the maximum allowable vapor pressure for fuels.

1. As the price for participation, all of the parties to the agreement pledged not to sue the EPA over its final clean-fuel regulations. Assume that the agreement to sue is not legally binding. What incentives do the parties at the table have to abide by their promise not to sue?
2. The *New York Times* reports that all parties involved were happy with the clean-fuels decision, calling it a win–win solution. Relabel the prisoner’s dilemma diagram in Section 12.6, using the strategies “negotiate” and “negotiate and sue” and the payoffs “average gas content” or “per gallon gas content” (for industry) and “strict vapor emissions” or “lax vapor emissions” (for environmentalists). Does the diagram illustrate, in principle, that all parties can be made better off by making an enforceable pledge not to sue?

APPLICATION 12.2

The Power of Information

Head to www.epa.gov/tri, read the *TRI Overview*, and then find out about the toxic releases for several plants in your zip code or one nearby. Do you find that the information is reported in an understandable form? Do you get any sense of the relative risk of exposure from the toxic releases reported? What has been happening to the reported releases over time? These data are self-reported by the companies. Do you trust its accuracy? If you were concerned about the health risk posed by the toxic releases in your neighborhood, what would you do about it?

¹³This problem is drawn from information reported in “U.S. Agencies Use Negotiations” (1991).

APPLICATION 12.3

Exploring Regulatory Rollback

Do a Google search on “Trump environmental regulation rollback.” Find three regulations that the President proposed to roll back in the 2017 to 2020 period. Now do a little research on these rollbacks.

1. What is the proposed change to the existing regulation? Who wins and who loses from the change?
2. What is the status of the proposal? Has it replaced the previous regulation or is still in the proposal phase or under court challenge?
3. What was the Trump EPA’s justification for the change?
4. Why did environmentalists oppose the change?
5. What is the pollution reduction or resource protection goal of the original law the regulation is supposed to be enforcing?
6. Do you agree with the Trump EPA’s reasoning for the rollback, or do you support the reasoning behind the original regulation? Why?

KEY IDEAS IN EACH SECTION

- 12.1** This chapter discusses two primary obstacles to effective government regulation of pollution: **imperfect information** and the opportunity for **political influence**.
- 12.2** The “generic” regulatory process has three steps: (1) passage of a law by Congress and the president, (2) drafting of regulations by the EPA, and (3) implementation and enforcement by state officials. The United States currently relies on a **judicial model of regulation**, which reduces bureaucratic discretion and also can lead to regulatory gridlock.
- 12.3** The first obstacle facing regulators is highly imperfect information. Because the agency has so many tasks, it often drafts rules based on inadequate or poor data. In addition, the agency must deal with a **reporting bias** when it turns to outside groups for information. Two ways to address this problem are to improve **in-house analysis** and rely on **incentive-compatible regulation**.
- 12.4** Imperfect information gives rise to **bureaucratic discretion** in drafting and enforcing regulations. Bureaucratic motivations include **agency building**, **external career building** (influenced by the **revolving door**), and **job satisfaction**. Job satisfaction, in turn, can depend on **ideology**, the exercise of **power**, and the maintenance of a **quiet life**.
- 12.5** Where there is bureaucratic discretion, there is the opportunity for **political influence**. Political resources wielded by environmental groups and industry include **votes** and **dollars**. Dollars are useful for buying (1) **technical studies**, (2) **lobbying staff**, (3) **access** to decision-makers, and (4) **votes**. The prisoner’s dilemma model suggests that competition for political influence is a zero-sum game leading

to an overinvestment in lobbying. Political reforms that might reduce this wasted effort include eliminating the **tax-deductible status** of lobbying, sunshine laws, and lobbying restrictions for former government officials.

- 12.6** A key to EPA effectiveness since the 1970s was sufficient bipartisan belief in the agency’s role as a non-partisan, science-based regulator. However, the period of bipartisan support for government action to protect the environment, which had been eroding since the 1990s, came to an end with the 2016 election of President Trump. Industry officials and lobbyists were given most of the top leadership positions of the regulatory agencies, and commenced an across the board process of regulatory rollback, rejecting much of the science and economic analysis that the agencies had previously used to justify the rules. Economists call this an example of **regulatory capture**, in which the regulated industry gains control of the agency designed to regulate it in the public interest. Most of the Trump EPA actions were blocked by lawsuits; if Trump is reelected in 2020, the Courts will determine if the regulatory rollbacks were sufficiently justified by the EPA to go into effect. If Trump is not reelected, then the rollbacks will likely be withdrawn by the next administration.
- 12.7** The Communist experience illustrates the potential for massive government failure in the regulatory process. Such failure occurs when citizens are unable to express their political **demand for environmental regulation**. Doing so requires both **access to information** and **effective and widespread democracy**. The **Toxics Release Inventory** is a good example of government action to encourage such trends in the United States.

REFERENCES

- Broder, John. 2007. Rule to expand mountaintop coal mining. *New York Times*, 23 August, Page 1.
- Brulle, Robert J. 2018. The climate lobby: A sectoral analysis of lobbying spending on climate change in the USA, 2000 to 2016. *Climatic Change* 149(3): 289–303.
- Bryner, Gary C. 1987. *Bureaucratic discretion*. New York: Pergamon.
- Cleaning up. 1990. *The Atlantic*, October.
- Davenport, Coral. 2017. Counseled by industry, not staff, E.P.A. chief is off to a blazing start. *The New York Times*, 1 July. <https://www.nytimes.com/2017/07/01/us/politics/trump-epa-chief-pruitt-regulations-climate-change.html>
- Dunlap, Riley. 2019. Partisan polarization on the environment grows under Trump. Gallup Blog, 5 April. <https://news.gallup.com/opinion/gallup/248294/partisan-polarization-environment-grows-trump.aspx>
- Feshbach, Murray, and Alfred Friendly Jr. 1992. *Ecocide in the USSR*. New York: Basic Books.
- Fung, Archon, and Dara O'Rourke. 2000. Reinventing environmental regulation from the grassroots up: Explaining and expanding the success of the toxics release inventory. *Environmental Management* 25(2): 115–27.
- Goldenberg, Suzanne. 2009. Barack Obama's key climate bill hit by \$45M PR campaign. *Guardian*, 12 May, Page 1.
- Goodstein, Eban. 2018. Climate change at thirty. In *A new global agenda: Priorities, practices, and pathways of the international community*, ed. Diana Ayton Shenker. New York: Rowman and Littlefield.
- Greider, William. 1990. *Who will tell the people? The betrayal of American democracy*. New York: Simon & Schuster.
- Jenkins, Robin, Elizabeth Kopits, and David Simpson. 2009. Policy monitor—The evolution of solid and hazardous waste regulation in the United States. *Review of Environmental Economics and Policy* 3(1): 104–20.
- Lindsay, Dillon, Chris Sellers, Vivian Underhill, Nicholas Shapiro, Jennifer Liss Ohayon, Marianne Sullivan, Phil Brown, et al. 2018. The Environmental Protection Agency in the early Trump administration: Prelude to regulatory capture. *American Journal of Public Health* 108: S89–94.
- Luntz, Frank. 2019. Findings and insights on GOP climate strategy. Washington, DC: Luntz Global. 10 June. https://www.eenews.net/assets/2019/06/13/document_daily_01.pdf
- Mayer, Jane. 2016. *Dark money: The hidden history of the billionaires behind the rise of the radical right*. New York: Doubleday.
- McCright, Aaron, C. Xiao, and R. E. Dunlap. 2014. Political polarization on support for environmental protection in the USA, 1974–2012. *Social Science Research* 48: 251–60.
- Newport, Frank. 2018. Americans want government to do more on environment. *Gallup Politics*, 29 March. <https://news.gallup.com/poll/232007/americans-want-government-more-environment.aspx>
- Popovich, Nadja, Livia Albeck-Ripka, and Kendra Pierre-Louis. 2019. 83 environmental rules being rolled back under Trump. *The New York Times*, 9 June.
- Sanjour, William. 1992. *What EPA is like and what can be done about it*. Washington, DC: Environmental Research Foundation.
- Stigler, George. 1971. The theory of economic regulation. *The Bell Journal of Economics and Management Science* 2(1): 3–21.
- U.S. agencies use negotiations to pre-empt lawsuits over rules. 1991. *New York Times*, 23 September.
- What really pollutes? Study of a refinery proves an eye-opener. 1993. *Wall Street Journal*, 29 March.