

A Briefing Paper for Journalists

New Approaches to Environmental Cleanup

With the EPA reporting we're spending over \$140 billion a year to meet federal environmental laws, here's what you should know about using economic incentives for cleanup.

by Robert N. Stavins



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The Foundation for American Communications is an independent, non-profit institution providing education for journalists. Since 1979, 8,000 journalists have attended more than 160 FACS mid-career educational conferences sponsored by news organizations and philanthropic foundations.

This *NewsBackgrounder* is one of a continuing series of briefing papers published to help journalists better understand and report complex issues.

Journalists covering environmental regulation today often are surprised to find how rapidly the field is changing. For the past twenty years, environmental policy has been based on "command and control" regulations that essentially tell firms which pollution-control technologies to use and how much pollution they can emit.

Command and control regulations were powerful in the early battles against environmental degradation, but they have begun to reveal many of the same limitations that led to the collapse of command and control economies around the globe.

They can be inefficient. They hamper innovation in pollution-control methods. They ignore important differences among individuals, firms and regions. And command and control regulations, such as technological product and process requirements, tend to make the environmental debate a closed, technical discussion among bureaucrats and vested interest groups rather than an accessible public dialogue.

Now as we attack those shortcomings, you'll encounter a broad array of new approaches when you're covering environmental stories — approaches intended to be more effective and less costly at the same time.

The earliest variation on command and control was a performance standard. It set a uniform control target for firms while allowing them some latitude in how they met it. Such a standard might set a limit on the allowable units of a pollutant that can be released in each time period, but no limit on the means by which this goal is achieved.

But performance standards still have a very important economic problem. They place the same level of burden on each and every source of pollution. If a company has an old plant, and would have to amortize costs of pollution control over a short remaining plant life, a set of standards might be horrendously costly. Another company with a new plant might be able to exceed the standard much less expensively.

Ideally, the sources that can clean up at low cost should take on much of the burden, and those that find it too expensive should shed a bit of the burden. After all, we don't really care how much pollution comes from any one source, but only whether the overall environment is clean.

The new strategy is simply stated: Give firms and individuals direct and daily self-interest in protecting the environment. These are market-based policies aimed at giving firms financial incentives to find cleaner production technologies.

In some cases, environmental protection could be improved simply by removing existing government-mandated barriers to market activity. In others, elimination of government subsidies would help. For example, the U.S. Forest Service sells timber on government land to private lumber companies at a price below market rate. The practice has meant inefficient cutting, damage to watersheds and substantial loss of habitat.

Here are some of the other major approaches:

1 Deposit/Refund Systems

Concept:

A surcharge paid when buying potentially polluting products is refunded when the product or container is returned for recycling or proper disposal.

Example:

"Bottle bills," deposits on beverage bottles and cans.

Other cases where it can work:

Containerized hazardous or solid waste, such as motor vehicle batteries, oil and tires. Rhode Island and Maine have deposit-refund systems for car batteries; Maine has a system for commercial-size pesticide containers.

Comments:

Recycling and environmentally safe disposal increase because the user is "paid" for doing it right.

2 Pollution Fee or Tax

Concept:

Charge for the amount of waste or pollution.

Examples:

The BTU tax that was an early casualty in the President's budget bill. Several European nations have air and water pollution charges.

Other cases where it can work:

Unit pricing for trash pickup, charging by the amount of trash collected (or the size of the container).

Comments:

The charge makes it worthwhile for a producer to cut back, right up to the point where it begins to cost more to reduce pollution than to pay the tax. A system like this also raises money for government, allowing government, if it chooses, to reduce taxes in other areas while collecting the same amount of total revenue.

3 Tradeable Permits

Concept:

The government specifies an overall level of pollution we'll tolerate, then gives each polluter a "permit" for its portion of the total. Firms that keep emissions below their allotted levels may sell or lease the surplus to other firms that can use the permits to exceed their original allotments.

Example:

The 1990 clean air act set up tradeable permits for sulfur dioxide emissions in an effort to reduce acid rain. The approach may save the economy \$1 billion a year.

Other cases where it can work:

Water pollution from both point and non-point sources. International trading in greenhouse gas permits.

Comments:

If the number of permit holders is very high, the program can be expensive to operate. If the number is very small, some firms could monopolize the market.

When used correctly, these market-based approaches will allow us to reach a level of environmental protection at lower total cost than would be possible with "command and control." Market forces tend to drive decisions toward least-cost solutions.

Offer the right incentives, and business will develop and adopt better pollution-control technology, rather than stagnating at "commanded" technology.

Market-oriented policies won't work for all problems, of course. Don't let anyone suggest that any single one of these economic incen-

tive approaches will be a panacea for all problems. It's a mistake to start with a policy instrument, then go in search of applications. But this kind of flexible approach, using several solutions, is gaining favor quickly among the regulated and the regulators.

What does it mean for your reporting?

It should shift the story in a more interesting direction, since "command and control" tends to center on scientific and engineering technicalities. These new approaches are more oriented to goals and policy, so an informed public can more easily join the debate and participate in decisions.

C O V E R A G E T I P S

- Avoid relying exclusively on the flame-throwers on either side of the issue. Reporting the extreme ends of a range of opinion may make you feel safe, but it tends to leave readers and viewers confused and uninformed.
- Recognize that not all experts are created equal. Some have a large ax to grind. Environmentalist and industry perspectives are a good beginning, but you should build a broad set of expert contacts. There is tremendous expertise – often focused and narrow – in the U.S. Environmental Protection Agency, Department of Interior and state and local agencies. You'll most often find neutral experts in academic institutions and think-tanks. (Resources for the Future in Washington, D.C. is the nation's preeminent think-tank on environmental and resource economics.)
- Beware of experts who venture outside their areas of expertise. Some may lead you to think that because they know about one aspect of a story, they know a lot about other aspects as well.
- Beware of experts who see merits on only one side of the issue. The real world is more complex.
- Build your intellectual capital. To learn more about the issues in this *NewsBackgrounder*, for instance, take a course in environmental economics at your local university. It won't make you an expert, but will help you interview experts.
- Put together a reference library. Begin with an introductory text on environmental economics, such as Tom Tietenberg's *Environmental and Natural Resources Economics*, published by Harper Collins, Inc. The *Inside EPA* newsletter and weekly bulletins of the Energy and Environment Study Institute in Washington are excellent for covering federal policy developments. *Environmental Writer*, the newsletter of the Environmental Safety Center, is aimed at journalists.
- Avoid misleading graphics. The issues lend themselves to graphs and graphics, but make sure they're helping convey an accurate message. Darrell Huff's *How to Lie with Statistics* is a good guide for avoiding error.
- Try, try, try to avoid the temptation of drama. Anecdotes about the family near the toxic waste facility may be entertaining, but may also be misleading. Environmental groups will claim calamity (that's their job), while industry will claim things are better than they are (that's their job). The truth usually lies somewhere between.

FURTHER READING

The following publications provide more thorough overviews of the potential use of market-based mechanisms for environmental protection:

Anderson, Robert C., Lisa A. Hofmann, and Michael Rusin. *The Use of Economic Incentive Mechanisms in Environmental Management.* Washington, DC: American Petroleum Institute, June 1990. Available by contacting the American Petroleum Institute, 1220 L Street, NW, Washington, DC 20005.

Moore, John L., et al. *Using Incentives for Environmental Protection: An Overview.* Washington, DC: Congressional Research Service, June 1989. Available to government employees from the Library of Congress' Congressional Research Service at (202) 707-5700. Members of the general public

must make their requests through their U.S. Senator or Representative.

Stavins, Robert N., ed. *Project 88—Harnessing Market Forces to Protect Our Environment: Initiatives for the New President.* A Public Policy Study sponsored by Senator Timothy E. Wirth, Colorado, and Senator John Heinz, Pennsylvania. Washington, DC, December 1988. Available from Robert N. Stavins, Associate Professor of Public Policy, John F. Kennedy School of Government, Harvard University, 79 John F. Kennedy Street, Cambridge, MA 02138, (617) 495-1820.

Stavins, Robert N., ed. *Project 88—Round II, Incentives for Action: Designing Market-Based Environmental Strategies.* A Public Policy Study sponsored by

Senator Timothy E. Wirth, Colorado, and Senator John Heinz, Pennsylvania. Washington, DC. May 1991. Available from (see above).

U.S. Environmental Protection Agency. *Economic Incentives for Environmental Protection.* Office of Policy, Planning, and Evaluation, Economic Incentives Task Force, 21P-2001. Washington, DC, March 1991. Available from EPA's Public Information Center, 401 M St., S.W., Washington D.C. 20460, (202) 260-7751.

U.S. Environmental Protection Agency. *Reducing Risk: Setting Priorities and Strategies for Environmental Protection.* Science Advisory Board, SAB-EC-90-021. Washington, DC. September 1990. Available from EPA's Public Information Center (see above).