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New, Cost-Conscious Environmentalism: Challenge Is to 'Harness Power of Markets'

By Robert Stavins

For two decades, we have improved the quality of our air, water, land, and natural resources through "command and control" regulations that essentially have told firms which pollution-control technologies to use and how much pollution they could emit.

But now, in an era of new environmental challenges and heightened sensitivity to regulatory compliance burdens, market forces can offer a more powerful, far-reaching, efficient, and democratic tool than centralized regulations for protecting the environment.

The challenge in the 1990s is to harness the power of markets to achieve increases in environmental protection at lower costs. 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.

The new Administration and Congress should seek to apply market-based principles to a variety of environmental challenges, including municipal solid waste, recycling, hazardous waste disposal, and air and water pollution.

The days when the US could afford to consider environmental protection without regard to its costs have ended. The Environmental Protection Agency estimates we now spend more than $130 billion annually to comply with federal environmental laws and regulations, and there is heightened concern over the impact of these regulations on the strength of our national economy and our ability to compete in international markets.

As a result, policymakers are eager to hold regulatory burdens to a minimum. While there is strong and increasing support among the public for environmental protection, citizens and policymakers are giving increased attention to making the most of scarce resources and maximizing returns on the resources we invest — business costs, regulatory effort, political capital, and taxes — to improve the quality of our environment.

Market-based policies start with the notion that the best way to protect the environment is to give firms and individuals a direct and daily self-interest in doing so. They aim to strengthen environmental protection by changing the financial incentives that face millions of firms and individuals

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reduce air pollution and traffic congestion, with revenues used to reduce Social Security taxes. By dedicating the revenues from federal gas taxes to the Social Security Trust Fund, we can reduce workers' payroll taxes while providing important incentives for increased fuel efficiency.

• Expand scientific research on, and use of, risk assessment as part of a national effort to set environmental priorities. In an era of constrained resources, we need to target our environmental protection efforts (and limited dollars) at those problems that will yield the greatest reductions in risk.

These economically rational policies do not represent a laissez-faire, free-market approach. They recognize that market failures are typically at the core of environmental degradation. At the same time, an incentive-based policy rejects the notion that such market failures justify scrapping the market and dictating the behavior of firms or consumers.

Instead, they provide freedom of choice to businesses and consumers in determining the best way to reduce pollution. By ensuring that society's environmental costs are factored into each firm's (or individual's) decision-making, incentive-based policies harness rather than impede market forces and channel them to achieve environmental goals at the lowest possible cost to society at large.

No single policy mechanism can be an environmental panacea, but market-based instruments can provide more cost-effective solutions for some pressing environmental problems, while spurring important technological advances. Ultimately, the greatest service that market mechanisms for environmental protection may render is to bring environmental policy formulation "out of the closet."

We should enact an increase in the gasoline tax to reduce air pollution and traffic congestion, with revenues used to reduce Social Security taxes. That way, we can cut workers' payroll taxes while providing incentives for higher fuel efficiency.

Americans have always been shielded from many of the very real trade-offs involved in establishing our environmental goals, programs, and standards. Policy formulation has been shrouded in technical complexity, which frequently obscures the more basic question of whether we are getting our money's worth on our choice of environmental goals and the means for achieving them.

Market-based instruments can bring these important questions into the open by making the incremental costs and advantages of environmental protection explicit. As a result, policy discussions can move away from a narrow focus on technical specifications to a broader consideration of goals and strategies. This can help get the American public involved in constructive debates regarding the desirable level and types of environmental protection.

But good ideas are not self-adopting. Promoting the selective use of market-based mechanisms will require political courage, but it is the right thing to do for a variety of environmental problems — for both environmental and economic reasons. Furthermore, market-based approaches offer potential political dividends: Most Americans will agree the polluter ought to pay.

in their private decisions about what to consume, how to produce, and where to dispose of their wastes.

As a result, market-based policies, which include green charges, tradeable permit systems, and a range of other approaches, offer many important advantages:

• They enable environmental protection to be pursued at a lower cost of compliance to private industry, and thereby at a lower cost to consumers.

• They give firms a constant incentive to find new and better technologies for combating pollution rather than locking one kind of pollution-control technology into place.

• They can move environmental rules out of the exclusive domain of scientists, economists, lawyers, and lobbyists and open the process to the public.

• They make the incremental cost of environmental protection more visible, and thus can focus public debate on the most efficient ways to protect the environment, rather than simply on the evils of pollution.

• And because some market-based approaches, such as pollution charges, raise substantial revenues, they enable government to reduce "distortionary" taxes — ones that reduce market efficiency by taxing **desirable** activities, such as investment and labor — and replace them with levies that discourage socially **undesirable** behavior, such as pollution and degradation of natural resources.

Despite these benefits of market-based approaches, their use has been widely resisted: by environmentalists who view the market as the problem rather than a solution; by environmental bureaucrats who resist change from an old regulatory system that emphasizes highly technical specifications about pollution control devices and standards; by lobbyists on both sides of the debate whose role in the process could be endangered by this new approach to environmental protection; and, of course, by those who oppose environmental protection altogether.

Now, however, a confluence of forces has heightened interest in market-based approaches and raised the likelihood that the nation will move beyond the polarized environmental debate of the past decade. Sluggish economic growth, high public-sector deficits, and concerns over international competitiveness have focused new attention on the private and public costs of environmental regulation.

Changes of attitude within the environmental movement and bureaucracy also herald a new openness to using market forces to regulate the market itself. And the emergence of new threats to the environment has combined with the stubbornness of old threats to spur the search for better ways to control pollution.

The new Administration and Congress should capitalize on these changes and seek to apply market-based approaches to a variety of environmental challenges, including municipal solid waste, recycling, hazardous waste disposal, air and water pollution, and international environmental threats such as global warming and the loss of biodiversity.

To start, the federal government should:

• Create national deposit-refund systems for lead-acid batteries and some solvents. By applying the approach already used by a number of state "bottle bills" to the health threat posed by illegal disposal of motor-vehicle lead-acid batteries, we can reduce significantly, and cost-effectively, the number of batteries that wind up in landfills and incinerators.

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• Promote "unit pricing" for trash pickup at the state and local level. By charging households more if they produce more trash, municipalities can reduce solid waste disposal costs, encourage recycling, and reduce the use of virgin materials, while preserving a high degree of individual choice.

• Create a tradeable permit system to promote solid waste recycling, and explore applications for water pollution and other environmental challenges. A tradeable permit system would induce firms to recycle and to use recycled materials in their production processes. Generally, by using this policy instrument to allocate the pollution-control burden among firms, the total costs of control can be reduced dramatically.

• Enact carbon charges domestically, with revenues recycled to consumers by lowering other taxes, as a means of achieving internationally established and enforceable long-term goals for controlling greenhouse gases.

• Enact an increase in the gasoline tax to