## **Tradable Pollution Permits**

The distinction between a fine and a fee is also relevant to the debate over how to reduce greenhouse gases and carbon emissions. Should government set limits on emissions and fine companies that exceed them? Or should government create tradable pollution permits? The second approach says in effect that emitting pollution is not like littering but simply a cost of doing business. But is that right? Or should some moral stigma attach to companies that spew excessive pollution into the air? To decide this question, we need not only to calculate costs and benefits; we have to decide what attitudes toward the environment we want to promote.

At the Kyoto conference on global warming (1997), the United States insisted that any mandatory worldwide emissions standards would have to include a trading scheme, allowing countries to buy and sell the right to pollute. So, for example, the United States could fulfill its obligations under the Kyoto Protocol by either reducing its own greenhouse gas emissions or paying to reduce emissions someplace else. Rather than tax gas-guzzling Hummers at home, it could

pay to restore an Amazonian rain forest or modernize an old coal-burning factory in a developing country.

At the time, I wrote an op-ed in *The New York Times* arguing against the trading scheme. I worried that letting countries buy the right to pollute would be like letting people pay to litter. We should try to strengthen, not weaken, the moral stigma attached to despoiling the environment. I also worried that, if rich countries could buy their way out of the duty to reduce their own emissions, we would undermine the sense of shared sacrifice necessary to future global cooperation on the environment.

<sup>45</sup>??The *Times* was flooded with scathing letters—mostly from economists, some of them my Harvard colleagues. I failed to understand the virtue of markets, they suggested, or the efficiencies of trade, or the elementary principles of economic rationality.

46?? Amid the torrent of criticism, I did receive a sympathetic email from my old college economics professor. He understood the point I was trying to make, he wrote. But he also asked a small favor: Would I mind not publicly revealing the identity of the person who had taught me economics?

I've since reconsidered my views about emissions trading to some extent—though not for the doctrinal reasons the economists put forward. Unlike tossing litter out the car window onto the highway, emitting carbon dioxide is not in itself objectionable. We all do it every time we exhale. There's nothing intrinsically wrong with putting CO<sub>2</sub> into the air. What is

objectionable is doing so in excess, as part of an energy-profligate way of life. That way of life, and the attitudes that support it, are what we should discourage, even stigmatize.

41/??One way of reducing pollution is by government regulation: require

automakers to meet higher emissions standards; ban chemical companies and paper mills from dumping toxic waste into waterways; require factories to install scrubbers on their smokestacks. And if the companies fail to abide by the standards, fine them. That's what the United States did during the first generation of environmental laws, in the early 1970s.

<sup>48</sup>?? The regulations, backed by fines, were a way of making companies pay for their pollution. They also carried a moral message: "Shame on us for spewing mercury and asbestos into lakes and streams and for befouling the air with choking smog. It's not only hazardous to our health; it's no way to treat the earth."

Some people opposed these regulations because they dislike anything that imposes higher costs on industry. But others, sympathetic to environmental protection, sought more efficient ways of achieving it. As the prestige of markets grew in the 1980s, and as economic ways of thinking deepened their hold, some environmental advocates began to favor market-based approaches to saving the planet. Don't impose emission standards on every factory, they reasoned; instead, put a price on pollution and let the market do the rest.

49?? The simplest way of putting a price on pollution is to tax it. A tax on emissions can be seen as a fee rather than a fine; but if it's big enough, it has the virtue of making the polluters pay for the damage they inflict. Precisely for this reason, it is politically difficult to enact. So policy makers have embraced a more market-friendly solution to pollution—emissions trading.

In 1990, President George H. W. Bush signed into law a plan to reduce acid rain, which is caused by sulfur dioxide emissions from coal-burning power plants. Rather than set fixed limits for each power plant, the law gave each utility company a license to pollute a certain amount, and then let the companies buy and sell the licenses

among themselves. So a company could either reduce its own emissions or buy extra pollution permits from a company that had managed to pollute less than its allotted amount.

50??Sulfur emissions declined, and the trading scheme was widely regarded as a success.

51?? Then, later in the 1990s, attention turned to global warming. The Kyoto Protocol on climate change gave countries a choice: they could reduce their own greenhouse gas emissions or pay another country to reduce theirs. The rationale of this approach is that it reduces the cost of complying. If it's cheaper to replace kerosene lamps in Indian villages than to abate emissions in the United States, why not pay to replace the lamps?

Despite this inducement, the United States did not join the Kyoto agreement, and subsequent global climate talks have foundered. But my interest is less in the agreements themselves than in how they illustrate the moral costs of a global market in the right to pollute.

With the proposed market in procreation permits, the moral problem is that the system prompts some couples to bribe others to relinquish their chance to have a child. This erodes the norm of parental love, by encouraging parents to regard children as alienable, as commodities for sale. The moral problem with a global market in pollution permits is different. Here, the issue is not bribery but the outsourcing of an obligation. It arises more acutely in a global setting than in a domestic one.

Where global cooperation is at stake, allowing rich countries to avoid meaningful reductions in their own energy use by buying the right to pollute from others (or paying for programs that enable other countries to pollute less) does damage to two norms: it entrenches an instrumental attitude toward nature, and it undermines the spirit of shared

sacrifice that may be necessary to create a global environmental ethic. If wealthy nations can buy their way out of an

obligation to reduce their own carbon emissions, then the image of the hiker in the Grand Canyon may be apt after all. Only now, rather than pay a fine for littering, the wealthy hiker can toss his beer can with impunity, provided he hires someone to clean up litter in the Himalayas.

True, the two cases are not identical. Litter is less fungible than greenhouse gases. The beer can in the Grand Canyon is not offset by a pristine landscape half a world away. Global warming, by contrast, is a cumulative harm. From the standpoint of the heavens, it doesn't matter which places on the planet send less carbon to the sky.

But it does matter morally and politically. Letting rich countries buy their way out of meaningful changes in their own wasteful habits reinforces a bad attitude—that nature is a dumping ground for those who can afford it. Economists often assume that solving global warming is simply a matter of designing the right incentive structure and getting countries to sign on. But this misses a crucial point: norms matter. Global action on climate change may require that we find our way to a new environmental ethic, a new set of attitudes toward the natural world we share. Whatever its efficiency, a global market in the right to pollute may make it harder to cultivate the habits of restraint and shared sacrifice that a responsible environmental ethic requires.

Carbon Offsets

The growing use of voluntary carbon offsets raises a similar question. Oil companies and airlines now invite customers to make a monetary payment to neutralize their personal contribution to global warming. British Petroleum's website enables customers to calculate the amount of CO<sub>2</sub> their driving habits produce and to offset their emissions by

making a financial contribution to green energy projects in the developing world. According to the website, the average British driver can offset a year's worth of emissions for about £20. British Airways offers a similar calculation. For a payment of \$16.73, you can neutralize your share of the greenhouse gases produced by a round-trip flight between New York and London. The airline will remedy the damage your flight does to the heavens by sending your \$16.73 to a wind farm in Inner Mongolia.

<sup>52</sup>??Carbon offsets reflect a laudable impulse: to put a price on the damage our energy use inflicts upon the planet, and to pay the price, person by person, of setting it right. Raising funds to support reforestation and clean energy projects in the developing world is certainly worthwhile. But offsets also pose a danger: that those who buy them will consider themselves absolved of any further responsibility for climate change. The risk is that carbon offsets will become, at least for some, a painless mechanism to buy our way out of the more fundamental changes in habits, attitudes, and ways of life that may be required to address the climate problem.

53??Critics of carbon offsets have compared them to indulgences, the monetary payments sinners paid the medieval church to offset their transgressions. A website called

www.cheatneutral.com?? parodies carbon offsets by arranging the purchase and sale of offsets for infidelity. If someone in London feels guilty for cheating on his (or her) spouse, he can pay someone in Manchester to be faithful, thus "offsetting" the transgression. The moral analogy isn't perfect: Betrayal isn't objectionable only, or mainly, because it increases the sum of unhappiness in the world; it's a wrong to a particular person that can't be set right by

a virtuous act elsewhere. Carbon emissions, by contrast, are not wrong as such, only in the aggregate.

54??Still, the critics have a point. Commodifying and individuating

responsibility for greenhouse gases could have the same paradoxical effect as charging for late pickups at the day-care center, producing more bad behavior rather than less. Here's how: In a time of global warming, driving a Hummer is seen as less a status symbol than a sign of wasteful self-indulgence, a kind of gluttony. Hybrids, by contrast, have a certain cachet. But carbon offsets could undermine these norms by seeming to confer a moral license to pollute. If Hummer drivers can assuage their guilt by writing a check to an organization that plants trees in Brazil, they may be less likely to trade in their gas-guzzler for a hybrid. Hummers may seem respectable rather than irresponsible, and the pressure for broader, collective responses to climate change could recede.

The scenario I've described is speculative, of course. The effects on norms of fines, fees, and other monetary incentives cannot be predicted with certainty and vary from case to case. My point is simply that markets reflect and promote certain norms, certain ways of valuing the goods they exchange. In deciding whether to commodify a good, we must therefore consider more than efficiency and distributive justice. We must also ask whether market norms will crowd out nonmarket norms, and if so, whether this represents a loss worth caring about.

I do not claim that promoting virtuous attitudes toward the environment, or parenting, or education must always trump competing considerations. Bribery sometimes works. And it may, on occasion, be the right thing to do. If paying underachieving kids to read books brings a dramatic improvement in reading skills, we might decide to try it, hoping we can teach them to love learning later. But it is important to remember that it is bribery we are engaged in, a morally compromised practice that substitutes a lower norm (reading to make money) for a higher one (reading for the love of it).

As markets and market-oriented thinking reach into spheres of life traditionally governed by nonmarket norms—health, education, procreation, refugee policy, environmental protection—this dilemma arises more and more often. What should we do when the promise of economic growth or economic efficiency means putting a price on goods we consider priceless? Sometimes, we find ourselves torn about whether to traffic in morally questionable markets in hopes of achieving worthy ends.