Globalization has made the world increasingly interdependent, and increased the need to work together to solve common problems. But as I point out in my forthcoming book, Making Globalization Work, it will do us little good to solve our common global economic problems if we do not do something about the most pressing common environmental problem: global warming.

In Kyoto, nine years ago, the world took an important first step to curtail the greenhouse gas emissions that cause global warming. But in spite of Kyoto's achievements, the United States, the world's largest polluter, refuses to join in and continues to pollute more and more, while the developing countries, which in the not too distant future will be contributing 50% or more of global emissions, have been left without firm commitments to do anything. It is now clear that something else is needed. I propose here an agenda to deal first with the United States' pollution and second with developing countries.

Reducing United States Emissions

The first step is to create an enforcement mechanism to prevent a country like the United States, or any country which refuses to agree to or to implement emission reductions from inflicting harm on the rest of the world. It is, perhaps, predictable that it would be the United States, the largest polluter, that has refused to recognize the existence of the problem. If the United States could go its own merry way—keeping the carbon dioxide it emits over its own territory, warming up its own atmosphere, bearing itself whatever costs (including hurricanes) that result, that would be one thing. But that is not so. The energy profligate lifestyle of the United States inflicts global damage immensely greater than any war it might wage. The Maldives will within 50 years be our own 21st century Atlantis, disappearing beneath the ocean; a third of Bangladesh will be submerged, and with that country's poor people crowded closer together, incomes already close to subsistence level will be further submerged.

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At first, President Bush denied the existence of global warming; when his own National Academy confirmed what every other scientific body had said, he promised to do something—but did little. Some American politicians whine that emissions reduction will compromise America’s living standards; but America’s emissions per dollar of GDP are twice that of Japan. America not only can afford to conserve more, it actually would enhance its energy security by doing so. It would be good for its environment and for its economy—though not, perhaps, for the oil companies that have prospered so well under the current Administration.

Fortunately, we have an international trade framework that can be used to force states that inflict harm on others to behave in a better fashion. Except in certain limited situations (like agriculture), the WTO does not allow subsidies—obviously, if some country subsidizes its firms, the playing field is not level. A subsidy means that a firm does not pay the full costs of production. Not paying the cost of damage to the environment is a subsidy, just as not paying the full costs of workers would be. In most of the developed countries of the world today, firms are paying the cost of pollution to the global environment, in the form of taxes imposed on coal, oil, and gas. But American firms are being subsidized—and massively so.

There is a simple remedy: other countries should prohibit the importation of American goods produced using energy intensive technologies, or, at the very least, impose a high tax on them, to offset the subsidy that those goods currently are receiving. Actually, the United States itself has recognized this principle. It prohibited the importation of Thai shrimp that had been caught in “turtle unfriendly” nets, nets that caused unnecessary deaths of large numbers of these endangered species. Though the manner in which the United States had imposed the restriction was criticized, the WTO sustained the important principle that global environmental concerns trump narrow commercial interests, as well they should. But if one can justify restricting importation of shrimp in order to protect turtles, certainly one can justify restricting importation of goods produced by technologies that unnecessarily pollute our atmosphere, in order to protect the precious global atmosphere upon which we all depend for our very well-being.

Japan, Europe, and the other signatories of Kyoto should immediately bring a WTO case charging unfair subsidization. Of course, the Bush Administration and the oil companies to which it is beholden will be upset. They may even suggest that this is the beginning of a global trade war. It is not. It is simply pointing out the obvious: American firms have long had an unfair trade advantage because of their cheap energy, but while they get the benefit, the world is paying the price through global warming. This situation is, or at least should be, totally unacceptable. Energy tariffs would simply restore balance—and at the same time provide strong incentives for the United States to do what it should have been doing all along.

In some ways, the United States should welcome this initiative. It has often complained that one of the problems with the Kyoto protocol is that there is no enforcement mechanism. It claims that if it were to sign, it would feel obliged to meet its commitments, but other countries would not, and this would put the United States in a disadvantageous position. With a strong international sanction mechanism in place, all
could rest assured that there was, at last, a level playing field.

**GETTING THE DEVELOPING WORLD TO ADDRESS THE PROBLEM**

There is a second problem with Kyoto: how to bring the developing countries within the fold. The Kyoto protocol is based on national emission reductions relative to each nation's level in 1990. The developing countries ask, why should the developed countries be allowed to pollute more now simply because they polluted more in the past? In fact, because the developed countries have already contributed so much, they should be forced to reduce more. The world seems at an impasse: the United States refuses to go along unless developing countries are brought into the fold; and the developing countries see no reason why they should not be allowed to pollute as much per capita as the United States or Europe. Indeed, given their poverty and the costs associated with reducing emissions, one might give them even more leeway. But, given their low levels of income, that would imply that no restraints would be imposed on them for decades.

There is a way out, and that is through a common (global) environmental tax on emissions. There is a social cost to emissions, and the common environmental tax would simply make everyone pay the social cost. This is in accord with the most basic of economic principles, that individuals and firms should pay their full (marginal) costs. The world would, of course, have to agree on assessing the magnitude of the social cost of emissions; the tax could, for instance, be set so that the level of (global) reductions is the same as that set by the Kyoto targets. As technologies evolve, and the nature of the threat of global warming becomes clearer, the tax rate could adjust, perhaps up, perhaps down.

It would be good if the world could agree to use the proceeds to finance the range of global public goods that are so important for making globalization work better—for instance, for promoting health, research, and development. But that may be too ambitious. Alternatively, each country could keep its own revenues and use them to replace taxes on capital and labor: it makes much more sense to tax “bads” (pollution, like greenhouse gas emissions) than to tax “goods,” like work and saving. (Economists refer to these taxes as corrective taxes.) Hence, overall economic efficiency would be increased by this proposal. The big advantage of taxation over the Kyoto approach is that it avoids most of the distributional debate. Under Kyoto, getting the right to pollute more is, in effect, receiving an enormous gift. (Now that pollution rights are tradeable, we can even put a market value on them.) The United States might claim that because it is a larger country, it “needs” more pollution rights. Norway might claim that because it uses hydroelectric power, the scope for reducing emissions is lower. France might claim that because it has already made the effort to go into nuclear energy, it should not be forced to reduce more. Under the common tax approach, these debates are sidestepped. All that is asked is that everyone pay the social cost of their emissions, and that the tax be set high enough that the reductions in emissions is large enough to meet the required targets. The economic cost to each country is small—in some cases, actually negative. The cost is simply the difference in the “deadweight loss” of the emission tax and the tax.
for which it substitutes; and it is only differences in these differences that determine the divergent effects on various countries.

**Concluding Thoughts**

The world has invested enormously in the Kyoto approach, and the success achieved is impressive. But no one has suggested a way out of the current impasse, and it is time to start exploring alternatives. Global warming is too important to simply rely on the hope that somehow a solution will emerge; and too important simply to rely on the goodwill of the United States, especially given its flawed political system where campaign contributions from oil companies and others who benefit from emissions play such a key role. The well-being of our entire planet is at stake. We know what needs to be done. We have the tools at hand. We only need the political resolve.

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