

Saving the earth: An alternative scenario

by [John B. Cobb Jr.](#) in the [June 6, 2001](#) issue

The Collapse of the Kyoto Protocol and the Struggle to Slow Global Warming

By David G. Victor: Princeton University Press

When the threat of global warming burst into our awareness about 15 years ago, I was profoundly shaken. Human action would lead to the melting of the polar ice caps and the consequent rise of ocean levels. Low-lying islands and densely populated river deltas would disappear under the ocean waters. Eco-systems would be drastically altered, speeding up the extinction of species. Coral reefs would disappear along with all the fish dependent on them. Tropical diseases would migrate into the temperate zones. The already difficult prospect of providing food for a rapidly growing world population would be vastly complicated.

Surely, I thought, skepticism about the reality of the greenhouse effect would be overcome by the scientific evidence. Surely people would see that real change in economic practice is needed, not just a few minor adjustments.

But I was wrong. Although the extreme skeptics have indeed gradually lost influence, and humanly caused climate change has been publicly acknowledged, appeals for a large-scale shift in how we live and do business are rarely heard. A spirit of amelioration is in the air. At least within the political and business sectors, the issues now discussed are the exact nature of the changes that global warming will bring and the rate at which they will occur. These are important questions, to be sure. If the changes are small and gradual, the kind of shock I felt might have been an overreaction. Perhaps this is, after all, just one more problem to be taken in stride.

Unfortunately, such a tepid approach is not warranted by the facts. Each time a major scientific assessment is made, the official predictions become more disturbing. Currently, the scientific consensus is that the temperature of the planet

will rise six to eight degrees Fahrenheit during this century. This will make the planet hotter than it has been for millions of years. Even a rise of 11 degrees is now recognized as possible.

The rise in temperature will not be evenly distributed. Indeed, there may be dramatic cooling in some areas. One possible scenario is that rising temperatures may alter ocean currents, depriving Europe of the Gulf Stream and making it more like Labrador or Siberia. It is not surprising that Europeans are prepared to pay a considerable amount to reduce the risk of such a change.

What can be predicted with greatest confidence is that weather patterns will become less stable. Droughts and floods will increase in number and intensity. This is already happening. The 1998 floods in Bangladesh are but a foretaste of things to come.

One major response to the crisis has been a careful cost-benefit analysis. This focuses, almost by definition, on the economy, and those who do such analyses are rarely moved by the larger fate of the earth. They point out that little of the U.S. economy is closely tied to climate. Agricultural gains in some places will offset losses in others. It will be cheaper, they tell us, to adjust to increased storm damage, build more dikes and seawalls, relocate people and pay the costs of increased air-conditioning than it would be to take steps to slow global warming. The conclusion is that we should continue to pursue the economic growth that causes global warming, recognizing that some of our new wealth will be used to respond to weather-related problems.

Given the prominence of this kind of thinking, many of us were profoundly relieved when representatives of most of the world's nations met in Kyoto in 1997 and hammered out the Kyoto Protocol. We were deeply grateful to Al Gore for ensuring that the U.S. did not block agreement at that meeting, even though we knew that getting the protocol ratified, especially by the U.S., would be hard work. We knew that a Republican Congress would never support such a protocol if it was proposed by a Democratic president. But we hoped that either a Democratic Congress could be elected or a Republican administration might succeed in pushing the protocol through a Republican Congress. Our hearts sank when it became clear that the Bush administration has no intention of pursuing this effort.

Then David Victor's book appeared. The title was disheartening, and the book's sustained critique of the protocol upset those of us who had pinned our hopes on it. I approached the book in a defensive spirit, believing that the Kyoto Protocol is the only hope for slowing the emission of greenhouse gases. How could anyone write so dispassionately about its limitations, discouraging efforts to make it effective? Surely what the protocol needs is massive support in the face of the concerted opposition to it of the now nearly omnipotent oil lobby. Surely what we need is a massive effort to solve the protocol's deficiencies rather than a cool explanation of their insolubility.

I have not entirely transcended this reaction to the book. The author does not share my sense of horror at the prospect of continuing along our present path. Accordingly, he does not share my sense of urgency. There is little passion in the book, just a cold, hard look at the protocol and the prospects for its implementation.

Nevertheless, Victor is not the enemy. He bears bad news, but one's reaction to bad news should not be directed against its bearer. Victor's painstaking analysis shows that the signers of the protocol left the really difficult questions to be worked out later, according to an unrealistic timetable. He carefully analyzes the alternative ways these difficult matters could be dealt with and shows that none of them could succeed. We lack the necessary technical knowledge. The instruments for enforcement do not exist and would be unacceptable to governments. The effect of implementing the Kyoto Protocol, he says, would be to transfer vast sums of money from some countries to others without reducing the emission of greenhouse gases.

Victor sees no prospect of implementing the Kyoto Protocol partly because the production of greenhouse gases has risen steadily during the years since the Kyoto meeting. This makes the Kyoto goal of reducing such emissions to 7 percent below the 1990 level more and more unrealistic. Without drastic action we will be emitting 22 percent more greenhouse gases in the target year 2008 than we did in 1990, or 29 percent more than the Kyoto target. And the Bush administration calls for policies that would lead to a still larger gap. The goals of the protocol appear entirely unrealistic.

The U.S. signed the protocol only with the understanding that target goals could be met in other ways than by actually reducing emissions to the designated level. Of the two other procedures that were envisioned, the first was the trading of emission rights. If a company has the right to emit a certain amount of pollution and reduces

its pollution below that level, it can sell the difference to another company that finds it difficult to reach the allowed level. Overall pollution is reduced. The first company has gone further than the law required. The second company is paying for its continuing pollution and therefore has an incentive to improve when the cost of doing so is less than the cost of buying extra permits. The Kyoto Protocol envisions this kind of trading of emission rights among countries.

Victor points out that many of the preconditions for monitoring such trading among nations do not exist and cannot rapidly be created. They would require more intrusion by a global agency into the affairs of each nation than any nation has thus far accepted. Furthermore, even if such trading were implemented, it would be unlikely to reduce total emissions for some time, for reasons having to do with the collapse of the economies of the former Soviet Union. As a result of that collapse, emission levels there are far below the allowable levels. Consequently, these countries would be permitted to sell their rights to pollute without making any reduction in their own pollution. Indeed, they could greatly increase their pollution levels and still have rights to sell. The whole purpose of the Kyoto Protocol could thus be thwarted.

The Kyoto Protocol also allows a nation to emit more greenhouse gases if it increases the earth's capacity to absorb these gases. For example, it would receive credits for reforestation, a goal it might pursue in another country rather than within its own boundaries. Transferring pollution-reducing technology can also count toward a nation's target.

Victor does not fault the logic of these elements of the protocol, but he does point out the extreme difficulty of measuring and monitoring them. Determining how to do this measuring and monitoring, like many other things, was left for future conferences to decide. Victor rightly argues that governments would be likely to cook their books in order to meet the requirement. While reforestation would go on in some areas, forests would surreptitiously be cut down in others. Keeping tabs on such matters throughout the world would require systems that have not yet even been envisioned. The belief that others were cheating would reduce the incentive to be honest.

Rather than discounting either the possibility or the desirability of an agreement aiming at the goals of the protocol and adopting many of its policies, Victor makes proposals that he believes are more feasible. Since Kyoto does not allow some of the

elements in his proposal, he argues for a new basis. He could have written much the same book under the title *The Need for Revision of the Kyoto Protocol*. The issues he raises are technical rather than substantive. But “technical” questions often are decisive.

If simply to support the Kyoto Protocol is to beat our heads against a stone wall, then those who care about the future of the planet need to consider other ways of reducing the emission of greenhouse gases. Since the U.S. is the greatest contributor to the problem, Americans can make a substantial difference simply by pressing for changes in our own country. If we could actually decrease our production of greenhouse gases, new life might be breathed into the protocol’s goals. Those goals may be unattainable by 2008, but an American government could commit itself to significant reductions without condemning itself to draconian policies that the public would never accept. This would encourage other countries to make a real effort to reduce their own emissions. That Victor’s arguments do not apply to a scenario of this sort may indicate that those of us who want an international agreement along the lines of a modified Kyoto Protocol may have a better chance of success than his book suggests.

The energy crisis, now focused on California but containing threats for the rest of the country, provides an occasion for dramatic change. The higher prices for gas, electricity and gasoline that will result from the crisis will provide economic incentives to support the moral imperative to do all we can to protect the environment.

In the U.S., political leaders propose two scenarios. The first, to which the Bush administration seems largely committed, is to encourage oil and gas production and the building of conventional power plants. The administration wants to remove environmental constraints and the protection of such areas as the Arctic National Wildlife Refuge. This scenario would benefit oil companies but would not prevent increased costs to consumers. And it would hasten climate change. For this administration, the crisis is also an opportunity to renew commitment to nuclear power, which does not contribute significantly to climate change but places other, equally severe burdens on our descendants. Thus far the administration has trivialized the gains to be realized by efficiency and conservation.

The alternative proposal is to increase conventional production much more slowly, while emphasizing more benign sources of energy. The scenario calls for the

introduction of many energy-saving devices that would slow the rising demand for energy. It would lessen the increase of greenhouse gases and allow us to avoid building additional nuclear energy plants.

Almost everyone would be better off with the second scenario. It would lower energy costs for consumers, make more money available for other investments and reduce the damage to the global climate. Even oil and gas companies, if they would consider their long-term futures, would see the disadvantages in rapidly depleting their natural resources. Unfortunately, huge short-term profits can be made from the massive investment the Bush administration now favors, and currently this seems to outweigh all other considerations.

We should do all we can to support the second scenario rather than the first. Most of us can greatly reduce our consumption of electricity by changing our lighting and getting more efficient refrigerators. We can reduce consumption of heating and cooling fuels by improving our insulation. We can cut our gasoline consumption drastically by shifting from SUVs to the new generation of fuel-efficient and alternative energy cars. The rising prices of fuel will increasingly cause care for the earth and self-interest to coincide. With popular will and sufficient imagination, we could avoid building conventional power plants altogether.

But the short-term gains made by a popular movement, responding to increased costs and moral imperatives, cannot by themselves get us to the goal. We also need government regulations—an area in which the U.S. has lagged far behind other industrial countries. For example, government regulations can be used to push the automotive companies to produce vehicles that pollute far less.

We also need stricter regulations on home building, including regulations that encourage buildings that are net exporters of energy. Such buildings already exist and can be replicated. Our goal should be that half the buildings constructed in 2010 would require only solar heating or cooling systems. We should also have a massive program for retrofitting the homes of the poor so that rising fuel prices can be countered by reduced energy needs.

We can go even further. Paolo Soleri has envisioned cities that operate on passive solar energy and in which there is no motor transportation. An imaginative government concerned about global warming could test this concept. We could aim to build small model cities of this type during the next decade and begin to learn

how to build larger ones.

We could make it a national policy to wean agriculture from its dependence on fossil fuels as rapidly as possible. This effort would merge with existing movements for sustainable agriculture and organic farming. We should also encourage the production of food near the places where it is consumed, reducing dependence on packaging and transportation. Systematic national programs of these sorts would lead to a steady and substantial decline in the emission of greenhouse gases and greatly increase our ability to lead the family of nations into international agreements on the environment.

We need to reexamine our basic commitment to economic growth. Why are we so convinced that growth is needed? It does not contribute to general economic betterment. Most of the monetary gains go to the wealthiest 1 percent, and it is doubtful that they are any happier as a result. Why not redirect our emphasis from economic growth to economic improvement as one element in a total improvement of the human and ecological situation?

Our god has for so long been economic growth that such a proposal may seem heretical and unrealistic. Christians, however, are called to worship God, not wealth. God cares for the earth. Surely we should put the long-term well-being of the earth and all its inhabitants above the enrichment of the rich. If we did so the solution to the problem of global warming would be far easier.