Politics and Climate Change: A Game of COPs and Robbers

During each year of the 1990s, new temperature or rainfall or snowfall or El Niño or hurricane records were being set somewhere on the globe. Yet, record-setting events happen every year and we do not know for sure whether there are significantly more of them than might be expected, given the climate history of the recent decades. Nevertheless, many of those record-setting droughts, floods, heat waves, tornadoes, typhoons, hurricanes and El Niño events have been associated by one scientist or another with a human-induced global warming of the atmosphere.

As important as shifting climate patterns is the concern about the possibility of a sharp rise in the level of the world's oceans, as glaciers and Antarctic ice sheets melt, and as the water in the oceans warms up and expands. Small island nations and people living in low-lying coastal areas around the globe take this possibility very seriously, as the elevation of many of these areas is close to sea level. They would likely disappear under the ocean's surface.

Mounting evidence that human activities (mainly the increasing emissions into the atmosphere of greenhouse gases and tropical deforestation) are enhancing the naturally occurring greenhouse effect of the atmosphere has generated concern, even among previous skeptics like the politically influential oil and coal shipping and trading companies and the auto industry. For those who once doubted the scientific basis of global warming, the issue has moved increasingly from being viewed as cocktail-party and coffee break conversation to being a serious environmental and economic problem. Corporations have begun to work together to search for ways to address the "climate change problem."

While scientific uncertainty remains, there is a growing interest in applying the "precautionary principle," that is, to avoid taking actions that might harm people and the atmosphere.

What is the problem?

Societies, rich and poor, rely on fossil fuels for industrial activities and for economic development. As a Peruvian in the 1960s once said about air pollution in Lima, "Once our air is as polluted as it is in Los Angeles, we will be as developed as Los Angeles." Wrong.

Wrong, because more energy and more material use and the resulting pollution do not equate to development, and wrong because atmospheric pollution can generate social ills as well as health and ecological problems.

The burning of fossil fuels emits carbon dioxide (CO₂) into the atmosphere. This gas tends to allow shortwave radiation to enter the Earth's atmosphere but traps the longer-wave radiation as it seeks to escape into outer space. Along with other human-generated gases (methane, nitrous oxides, chlorofluorocarbons, etc.), CO₂ acts as the proverbial greenhouse and heats the lower atmosphere. Tropical and other deforestation also adds CO₂ to the atmosphere. As trees are cut down, they no longer pull carbon dioxide out of the air and sequester it; instead, they release it into the atmosphere.

Scientists using mathematical theories, equations and computer models have simulated what happens to the global climate system with an increase in greenhouse gases in the atmosphere. What happens is that the atmosphere (and in turn, the oceans) heats up by a couple of degrees Celsius. The scenarios of
climate-change impacts are scary, not because they definitely will happen, but because they are plausible. For example, several model scenarios show that the North American Great Plains (the U.S. Midwest and the Canadian Prairie Provinces) dry out with global warming. There is a lot of educated guessing and speculation about what environmental changes might accompany global warming: fish populations would tend to migrate poleward, as would the boreal (northern) forests; extreme events such as droughts and floods would become more frequent; forecasting climate variability from season to season and year to year would become less skillful with the advent of a new and unknown global climate regime; coral reef dieback would increase as ocean temperatures warmed; and so on. A key concern is that the rate of ecological change resulting from global warming would be faster than ecosystems and societies can adjust to.

**Conference of the Parties (COPs)**

After many discussions and planning sessions, the UN Framework Convention on Climate Change was adopted at the Earth Summit in 1992 and opened for signatures and then for ratification by a number of states over the next couple of years. There have been several meetings of national representatives of the countries that signed, ratified and acceded to the Convention. Sessions of these meetings, referred to as the Conference of the Parties, have dealt with the political, economic, technological and methodological issues related to global warming and, for the most part, they have centered on how to stabilize or reduce the national emissions of greenhouse gases, especially fossil fuels. For industrialized and "transition" countries, one of the toughest issues is allowing some of the developing countries to increase their emissions.

Obviously, politically opposed views on the issue have led to opposing political camps. Some of the issues that have arisen, for example, relate to "who pays" to stop these emissions, whether from fossil fuel use, fertilizer use, land use or deforestation. The developing country representatives argue that the industrialized countries saturated the atmosphere with such gases in their drive toward industrialization. They caused the problem and, therefore, they should fix it, i.e., invoking the "polluter pays" principle. The industrialized countries claim that the developing ones are less efficient in fuel burning and that in the 21st century they will produce the lion's share of greenhouse gases. Oil-producing countries also oppose any actions that might limit fuel consumption or deny them compensation for holding back on production and consumption. China, for example, has large coal reserves that it must use, in the absence of access to cleaner energy sources, in order to pursue its economic development. Which industrialized country is prepared to give (not sell) China clean technology? These are the types of concerns that are being discussed in the COPs.

- COP 1 was held in Berlin in March-April 1995 and addressed the "adequacy of national commitments" and produced a "mandate" to launch a process toward taking appropriate action to reduce greenhouse gases.
- COP 2 was convened in Geneva in July 1996. It called for legally binding objectives and significant reductions in greenhouse gas emissions.
- COP 3 was held in Kyoto in December 1997 with the intention of establishing and setting up a Protocol with a timetable for national reduction targets for emissions. The Protocol was so contentious that it was not ratified at the COP.
- COP 4 met in Buenos Aires in November 1998 for the purpose of seeking national commitments proposed in the Kyoto Protocol produced at COP 3. It
produced the Buenos Aires Plan of Action which established deadlines for finalizing the unresolved Kyoto Protocol issues by 2002.

- COP 5 was held in Bonn in October-November 1999. It produced a schedule for completing the outstanding details of the Kyoto Protocol by the next COP.

- COP 6 has been scheduled for November 2000 in The Hague, Netherlands.

There is a strong desire on the part of some governments to seek ratification of the Kyoto Protocol in time for the tenth anniversary of the Earth Summit that was held in Rio de Janeiro, Brazil...by the year 2002.

Robbers

Everyone around the globe is familiar with a bank. If you want to borrow money, you go to the bank and take out a loan. The banker and the borrower expect that the loan will have to be repaid at some agreed-upon time in the future. Even if it is an interest-free loan, it will have to be repaid. Looking at the natural world as a bank might lead to some resolution of the highly politically charged issues facing the COP representatives.

Nature's bank consists of a quantitative amount of natural resources: trees, soils, water, fish, minerals, etc. It consists of qualitative resources as well: a pristine rainforest versus a clear-cut one, fertile soils or soils depleted of nutrients by overuse, clean versus polluted water, abundant fish populations or ones decimated by overfishing, and so on.

Continuing the banking analogy, industrialized countries are borrowers who have not only drawn on Nature's quantitative abundance to attain their high levels of economic development, but have drawn on its qualitative abundance as well. Since they have sullied the atmosphere with fossil-fuel burning and CFCs for industrial and domestic uses, isn't it the right thing to do—to pay back Nature's bank, in this instance to restore the environmental quality that they borrowed in order to develop? This would enable the poorer countries seeking economic development to "use" the natural environment without producing a net increase in the amount of pollution (in this instance, the amount of "unnatural" greenhouse gases).

To get a loan from a bank without expecting to repay it would be a form of robbery. By analogy to rob Nature's bank of its quality with no intention of paying it back would also be a form of robbery. In this situation, the industrialized countries should pay back to Nature's bank its borrowed quality.

By Michael Glantz

Dr. Glantz is a member of numerous advisory boards related to environmental issues. You can read more of his work at <www.fragileecologies.com/mglantz>. See also the 16-country El Niño impact study at <www.direc.ucar.edu/esig/un>.

Captain Cousteau was a keynote speaker at the Earth Summit in Rio de Janeiro, Brazil, in 1992.