



The Climate Crisis and Carbon Trading

By Ross Gelbspan

As the earth's temperature rises faster than at any time in the last 10,000 years, the inaction by the Clinton Administration and the resistance by the U.S. Congress to deal with global climate change is isolating the U.S. diplomatically and courting severe warming-driven political, economic, and ecological disruptions.

With our burning of coal and oil, we humans are heating the deep oceans, fracturing Antarctic ice shelves, and fueling more intense El Niños. Glaciers all over the planet are retreating at accelerating rates. Islands are going under from rising sea levels. Plants, fish, birds, and insects are migrating northward. Among the consequences are malaria on Long Island, encephalitis in New York City, and a dramatic increase of tick-borne Lyme disease in New England. Because of the buildup of

atmospheric carbon dioxide, we have changed the timing of the seasons; spring now arrives more than a week earlier in the northern hemisphere than it did 20 years ago.

In a remarkable joint statement in December 1999, the chief meteorologist of the U.K. and the head of the U.S. National Oceanic and Atmospheric Administration (NOAA) declared that the climate situation is now "critical," and they urged the world to begin immediately to reduce its consumption of carbon fuels. In early March 2000, researchers found that although the planet's temperature had been rising at the rate of one degree Fahrenheit per

century between 1900 and 1970, it has been rising at the rate of four degrees per century since 1980. This rate of increase is clearly catastrophic.

Nevertheless, after years of talks among the 160 nations that agreed in principle in December 1997 to reduce carbon emissions, the U.S. seems farther than ever from ratifying the Kyoto Protocol. The agreement calls for the U.S. to cut its emissions by 7% below 1990 levels by 2012. Some 40 other industrial nations would be obligated to cut their emissions by an average 5.5% below 1990 levels. Under the Kyoto Protocol, developing countries would not be obligated to cut their emissions until the next round of the treaty takes effect.

Even if ratified and implemented, the Kyoto Protocol would still fall short—by an order of magnitude—of what nature requires to allow the climate to restabilize. The science is unambiguous that stabilization requires worldwide cuts of 60% to 70%, according to the Intergovernmental Panel on Climate Change, a group of more than 2,000 scientists from 100 countries reporting to the United Nations. The diplomatic fatigue that is overwhelming delegates to the climate talks arises from the relentless obstruction by big oil and big coal and from the exclusive focus on the deeply flawed mechanism of emissions trading to achieve emissions reductions.

Despite its inadequate goals, the Kyoto Protocol does provide a necessary diplomatic framework for nations to address the climate crisis. (See FPIF brief vol. 5, no. 8, April 2000.) What is preventing agreement on even these minuscule goals is the negotiators' reliance on emissions trading to achieve these cuts. This "cap-and-trade" scheme, promoted by market-mesmerized economists, determines each country's emissions quota. A country that emits less than its quota (e.g., Russia) could sell its unused allotment to another country (e.g., the U.S.), which could then emit that much more than its assigned quota. The overall emissions reduction targets would be increased over time.

Although "emissions trading," strictly defined, would take place only between industrial nations, its North-South variant, the Clean Development Mechanism (CDM) permits industrial nations to buy inexpensive reductions in developing countries. A typical CDM plan might involve selling China technology to make its coal cleaner. Or a U.S. coal-burning utility could pay to expand or preserve forests in Costa Rica, which would absorb some of the excess carbon dioxide emitted in the United States. These North-South carbon trades are being actively promoted by the World Bank—even as the Bank continues to underwrite carbon-intensive projects in poor countries. Between 1992 and 1998, the World Bank underwrote \$13.6 billion for coal-powered generating plants and oil and gas explorations in developing countries, according to a study by the Institute for Policy Studies.

There are profound problems with such proxy-reduction schemes. They are impossible to monitor. There is no agreement on enforcement mechanisms. Moreover, they allow wealthy countries to buy their way out of real carbon reductions at home. Finally, they are preventing the huge surge of worldwide economic expansion that would accompany the wholesale transfer of clean energy technologies to developing nations.

Key Points

- The global climate is changing more rapidly and earth's systems are proving more sensitive to warming than scientists thought a few years ago.
- To keep earth hospitable to civilization requires 70% cuts in the world's consumption of coal and oil and a rapid worldwide transition to clean energy.
- By insisting on an ineffectual and inequitable system of international emissions trading, the U.S. is obstructing other nations, courting ecological disaster, and preventing a worldwide economic boom from a transition to clean energy.

Problems With Current U.S. Policy

Domestically, properly designed emissions trading programs can be effective. The U.S. program to reduce acid rain-causing sulfur dioxide emissions has worked relatively well, because it is easy to monitor and enforce. About 80% of U.S. sulfur dioxide emissions belched from 2,000 smokestacks in the Midwest, which was a manageable number of sources to monitor. The program, moreover, was subject to a coherent system of national regulation. Although it has not eliminated all sulfur emissions from Midwestern power plants, it has reduced the amount of acid rain in Northeastern states.

By contrast, international carbon trading—either between industrialized countries or between industrial and developing nations—cannot work. Carbon is emitted from millions of sources all over the world—far too many to monitor. And there is no binding international regulatory system to enforce emissions limits. On the contrary, industrial nations are permitted to borrow from future allocations to avoid meeting specified limits within designated dates. Some nations are seeking trading credits for “emissions avoided,” resulting from more efficient energy projects planned long ago but only now coming on line. Moreover, under the 1990 baseline established for industrial countries, nations like Russia, whose economy shrank dramatically after the breakup of the Soviet Union, have large quantities of emissions rights to sell—even though it is emitting far less today than it did in 1990. And under another loophole in the current rules, coal-rich Australia is actually entitled to increase emissions by 8% over 1990 levels.

The “cap-and-trade” mechanism in the Kyoto Protocol is also fraught with profound equity problems. The industrial nations want allocations based on 1990 emission levels to ensure continuity of their economies. Developing countries contend that only a per capita allocation is fair. But if the emissions quota for each U.S. citizen were the same as each citizen of India, the U.S. economy would dramatically shrink.

Under the North-South Clean Development Mechanism, moreover, the Kyoto Protocol allows industrial nations to buy limitless amounts of cheap emissions reductions in poor countries and to bank them indefinitely into the future. This means that when developing nations eventually become obligated to cut their own emissions, they will be left with only the most expensive options—an outcome critics decry as a form of environmental colonialism.

Finally, even if all problems of monitoring and enforcement were solved and the equity problems addressed,

the “cap-and-trade” mechanism would still be inadequate to achieve the 70% reduction scientists say is required to pacify the inflamed atmosphere. At most, international carbon trading should be used as a fine-tuning instrument to help nations attain the last 10 to 15% of the 70% emissions reductions required to allow the climate to restabilize.

A number of governments—frustrated by U.S. obstructionism—are now moving ahead unilaterally. France is proposing a tax on fossil fuels. The Dutch are formulating a plan to reduce emissions by 80% over the next 50 years. Britain announced it will triple its Kyoto obligation (cutting its emissions by 21% below 1990 levels by 2012) and is committing to overall cuts of 60% within 50 years.

But a patchwork of national initiatives is not a good option. The Kyoto Protocol represents a profoundly important international effort. To allow the protocol to die a slow death, while countries take matters into their own hands, is counterproductive in the long term. What is needed is sustained international collaboration under a system that is effective, equitable, and enforceable.

Domestically, the U.S. is also undermining the intent behind emissions trading by continuing to subsidize coal, oil, and natural gas at the rate of about \$20 billion a year. With rising prices at the pump, U.S. officials are considering suspending gasoline taxes even as Europe reduces subsidies on fossil fuels.

Finally, the 1997 U.S. Senate resolution not to exempt developing countries from the first round of emissions cuts (as specified in the Kyoto Protocol and agreed to by former President George Bush) jeopardizes many corporations. If the U.S. does impose energy cuts on poor countries without providing equivalent sources of clean energy, developing countries’ purchasing power will shrink, triggering large job losses at Boeing, Gillette, Coca Cola, Procter & Gamble, and other companies that have saturated the domestic market and are seeking future earnings through exports to developing nations.

Key Problems

- The U.S. is committed to a deeply flawed system of international carbon trading. Though most nations say trading should be used to supplement domestic emissions cuts, the U.S. insists on meeting all its Kyoto obligations through trading.
- The U.S. has rejected a 2002 deadline for ratification of the Kyoto Protocol, a deadline supported by six of the G-8 nations.
- Washington’s obstructionist role in the Kyoto negotiations threatens a meltdown of the international diplomatic process.

Foreign Policy in Focus is a joint project of the Interhemispheric Resource Center (IRC) and the Institute for Policy Studies (IPS). The project depends on sales and subscription income, individual donors, and grants from The John D. and Catherine T. MacArthur Foundation, General Service Foundation, and various church organizations. *In Focus* internships are available. ISSN 1524-1939

Editors

Tom Barry (IRC)
Martha Honey (IPS)
Asia-Pacific Editor
John Gershman

Communications Directors

Tim McGivern (IRC)
Erik Leaver (IPS)
Project Administrator
Nancy Stockdale (IRC)

Orders and subscription information:

Mail: PO Box 4506
Albuquerque, New Mexico 87196-4506
Voice: (505) 842-8288
Fax: (505) 246-1601
Email: infocus@irc-online.org

Editorial inquiries and information:

IRC Editor Voice: (505) 388-0208
Fax: (505) 388-0619
Email: tom@irc-online.org

IPS Editor Voice: (202) 234-9382/3 ext. 232
Fax: (202) 387-7915
Email: ipsps@igc.apc.org

Website: <http://www.foreignpolicy-infocus.org/>

Toward a New Foreign Policy

First, industrial countries should switch national subsidies away from fossil fuels and toward renewable energy technologies. (A small portion of those subsidies should be retained for low-income fuel assistance as well as for job retraining of displaced coal miners.) The U.S. government spends about \$20 billion a year subsidizing the fossil fuels industry. Globally, the annual subsidy for carbon fuels has been estimated at \$300 billion. The

removal of those subsidies and the creation of equivalent support for renewable technologies would provide significant incentives for the major energy companies to aggressively develop fuel cells, solar and photovoltaic energy, and wind power. As renewable energies become economically competitive, these subsidies should be phased out.

Secondly, in place of the current emissions trading regime, parties to the Kyoto Protocol should adopt a progressively more stringent fossil fuel efficiency standard (FFES). If every nation began at its current baseline to increase its efficiency by specified amounts at designated intervals, that would sidestep the equity controversies embedded in international emissions trading. Such a standard would be far easier to negotiate and monitor

than the current "cap-and-trade" system. Fossil fuel efficiency monitoring would simply involve calculating changes in the ratio comparing a nation's annual carbon energy use to its gross domestic product.

Adoption of a progressive fossil fuel efficiency standard would require countries to derive progressively larger proportions of their energy from noncarbon or low-carbon energy sources. That, in turn, would stimulate the mass markets to slash the costs of solar, wind, hydrogen, and other noncarbon technologies and make them economically competitive with coal and oil. (Under a fossil fuel efficiency standard, all renewable, noncarbon technologies are considered 100% efficient.)

Were a progressive FFES to be adopted by the parties to the Kyoto talks, industrial nations could continue to supplement their progress by financing emissions reductions in developing nations. Unlike emissions trading, such "trades" would be a secondary instrument to complement much more sweeping energy changes worldwide.

Virtually all developing nations would be happy to switch to solar, wind, and hydrogen energy. Virtually none can afford it. Without significant financing for the technology transfer, education, and capacity building, this transition will not happen. The creation of an energy modernization fund is essential.

The most attractive revenue source to fund global energy conversion seems to be a tax on international currency transactions. Such a tax was first conceived by economist James Tobin, a Nobel laureate, as a way to stabilize capital flows. (See FPIF vol. 3, no. 5, April 1998.) In addition to this benefit, it appears to have the broadest based, least discriminatory, and least regressive impact of all the options for funding the energy modernization fund.

Since the late 1970s, when Tobin first proposed taxing currency transactions, their volume has skyrocketed. Today these transactions total about \$1.5 trillion per day. A quarter-of-a-penny tax per U.S. dollar on such transactions would easily yield the \$200 to \$300 billion a year developing nations will need to purchase, produce, and deploy climate-friendly energy sources.

The result of these combined strategies would be a worldwide energy transition, which would expand developing economies in much the same way as the Marshall Plan revitalized the economies of Europe after World War II. The creation of climate-friendly energy sources in developing countries would allow them to grow without regard to atmospheric limits and without the budgetary burden of imported oil. Moreover, with its large-scale creation of jobs, a program to rewire the planet with clean energy would raise living standards in the developing nations without compromising economic achievements in the industrialized nations.

Politically, this set of strategies should be attractive to the CEOs and heads of state who declared climate change to be the paramount challenge to humanity at the World Economic Forum in February 2000. The forum's requirement that industrial countries regulate multinational oil corporations, generate huge numbers of jobs in the renewable energy sector, and transfer significant amounts of energy generating resources to developing nations, should also appeal to the labor, human rights, and environmental constituencies that surfaced in November 1999 during the protests at the World Trade Organization meeting in Seattle.

Finally, there is a strong economic motivation to adopt policies like those discussed here. A worldwide transition to climate-friendly energy sources would generate a substantial increase in the total wealth and stability of the global economy. On the other hand, the costs of business-as-usual will be morally irresponsible, environmentally suicidal, and economically prohibitive. Without a rapid worldwide transition to clean energy, the continuing succession of floods, storms, droughts, epidemics, property losses, and incursions of environmental refugees will tear holes in the global economic fabric.

Ross Gelbspan, a former journalist with the Boston Globe, Philadelphia Bulletin, and Washington Post, is author of The Heat Is On (Perseus Books, 1998). He also maintains the website: <http://www.heatisonline.org/>.

Key Recommendations

- The developed nations should withdraw subsidies from oil and coal industries and create equivalent subsidies for renewable technologies to create incentives for the major oil companies to decarbonize their energy supplies.
- The U.S. should push for the adoption in the Kyoto Protocol of a progressive fossil fuel efficiency standard as the central mechanism for emissions reduction. This mechanism is easy to monitor, would eliminate equity issues, and could be complemented by a modest emissions trading system.
- The nations of the world should create a fund (on the order of \$300 billion a year) to finance the transfer of clean energy to developing countries by use of a Tobin tax.

Sources for More Information

Organizations

Center for Health and the Global Environment

Harvard Medical School
260 Longwood Ave., Rm. 262A
Boston, MA 02115
Voice: (617) 432-0493
Fax: (617) 432-2595
Email: paul_epstein@hms.harvard.edu

Website: <http://www.med.harvard.edu/chge/>
Contact: Dr. Paul Epstein, Associate Director

Centre for Science and Environment

41 Tughlakabad Institutional Area
New Delhi 110062
India

Voice: 91-11-6081110
Fax: 91-11-6085879
Email: anil@cseindia.org
Website: <http://www.cseindia.org/>
Contact: Anil Agarwal

Ozone Action

1700 Connecticut Ave. NW, Third Fl.
Washington, DC 20009
Voice: (202) 265-6738
Fax: (202) 986-6041
Email: ozone_action@ozone.org
Website: <http://www.ozone.org/>
Contact: Brandon Magillis/John Passacantado

The Tellus Institute

11 Arlington St.
Boston, MA 02116-3411
Voice: (617) 266-5400
Fax: (617) 266-8303
Email: sbernow@tellus.org
Website: <http://www.tellus.org/>
Contact: Dr. Steven Bernow

Tobin Tax Initiative USA

CEED/IIRP
Box 4167
Arcata, CA 95518-4167
Voice: (707) 822-8347
Fax: (707) 822-4457
Email: cecilr@humboldt1.com
Website: <http://www.tobintax.org/>
Contact: Ruthanne Cecil

Publications

Thomas R. Casten, *Turning Off The Heat* (Amherst, NY: Prometheus Books, 1998).

Ross Gelbspan, *The Heat Is On* (Cambridge, MA: Perseus Books, 1998).

Mahbub ul Haq, Inge Kaul, Isabelle Grunberg, ed. *The Tobin Tax: Coping With Financial Volatility* (Oxford: Oxford University Press, 1996).

Martin Hoffert, et al., "Energy implications of future stabilization of atmospheric CO₂ content," *Nature*, Oct. 29, 1998, vol. 395, pp. 881-884.

Intergovernmental Panel on Climate Change, *Climate Change 1995: Second Assessment Synthesis of Scientific-Technical Information Relevant to Interpreting Article 2 of the UN Framework Convention on Climate Change 1995* (Geneva, Switzerland: IPCC Secretariat, 1995).

Douglas Koplow and Aaron Martin, Industrial Economics, Inc., *Fueling Global Warming: Federal Subsidies to Oil in the United States*, prepared for Greenpeace, Intl., Amsterdam, June 1998.

OPIC, Ex-IM, and Climate Change: Business as Usual? (Washington, DC: Institute for Policy Studies, Friends of the Earth, and the International Trade Service, April 1999).

Websites

The Heat Is On

<http://www.heatisonline.org/>

Center for Environmental Economic Development

<http://www.ceedweb.org/>

Intergovernmental Panel on Climate Change

<http://www.ipcc.ch/>

United Nations Framework Convention on Climate Change

<http://www.unfccc.de/>

U.S. Global Change Research Program

<http://www.usgcrp.gov/>

Special Reports and Packets

FPIF produces Special Reports and Packets. Each Special Report focuses on a specific arena of U.S. foreign policy and offers analysis, an agenda for a new policy, and charts. Packets are comprised of a Special Report and related briefs, providing overviews of U.S. policy on specific topics and regions. Special Reports are \$5.00 each, postpaid. Ten or more copies of a single Special Report are \$3.50 each, postpaid. Packets are \$10.00 each, postpaid. Ten or more copies of a single Packet are \$8.00 each, postpaid.

The following Special Reports are currently available:

Nationalist Ideologies and Misperceptions in India-U.S. Relations
Challenges and Conundrums of a New Global Affairs Agenda
Continuing Storm: The U.S. Role in the Middle East
Military-Industrial Complex Revisited: How Weapons Makers are Shaping U.S. Foreign and Military Policies
U.S. and Africa: Starting Points for a New Policy
U.S. Leadership in the Global Economy
Money Talks: The Implications of U.S. Budget Priorities

Repairing the Global Financial Architecture
Global Environmental Protection in the 21st Century
Containment Lite: U.S. Policy Toward Russia
Corporate Welfare and Foreign Policy
U.S. Policy in Latin America

The following Packets are currently available:

Financial Flows Packet (*Financial Architecture* and 9 briefs)
Global Environment Packet (*Environmental Protection* and 12 briefs)
Corporate Welfare Packet (*Corporate Welfare* and 9 briefs)

Send me _____ sets of the _____ Packet at \$_____ per packet.

Send me _____ copies of the _____ Special Report at \$_____ per report.

Check enclosed

Bill the credit card below

Total for Packet: \$ _____

Total for copies of the Special Report: \$ _____

TOTAL PURCHASE: \$ _____

Name _____ Institution _____

Mailing Address _____

City _____ State _____ Zip Code _____

VISA/MasterCard Number _____ Expiration Date _____

Signature _____ Daytime Phone _____ Fax Number _____ Email Address _____

Send to:

IRC ♦ Box 4506 ♦ Albuquerque, NM 87196-4506

For faster service (Purchase Order and credit card orders only) fax this form to: (505) 246-1601 or call (505) 842-8288