

2 of 11 DOCUMENTS

The Washington Post

October 13, 1997, Monday, Final Edition

Coming to Terms On Global Warming

John Deutch

SECTION: OP-ED; Pg. A27**LENGTH:** 1346 words

I believe that what we know now about global warming justifies imposition of a modest tax on carbon emissions by the United States and other developed nations. It would be a first step toward ensuring that future generations will not find the concentration of atmospheric gases so great that it cannot be practically reversed before changes in the earth's climate cause calamitous damage.

The weight of informed scientific opinion is that the earth's average temperature will increase by about two to 6 1/2 degrees Fahrenheit by the year 2100. If the increase turns out to be at the upper end of this range, the resulting increase in temperature will cause significant climate change around the globe.

Effective action requires a concerted effort by all nations and involves significant economic costs. There is no right way to allocate these costs among nations; thus it becomes a matter of negotiation between developed nations whose past emissions have contributed the major portions of today's atmospheric burden and developing nations such as China, India, Brazil, Mexico and Indonesia, whose anticipated future economic growth and energy use will account for the bulk of growth in emissions.

Adjustments to means of production that use less energy and produce lower emissions -- for example, a shift away from electricity generated from coal -- will have major economic impacts, at least during the transition period. Not surprisingly, this prospective economic dislocation has prompted opposition from a broad industry coalition, as well as a Senate resolution warning that no treaty will be ratified that has a serious economic impact on the United States and unless all countries make commitments (not necessarily identical for all parties) for greenhouse-gas reductions.

This December, in Kyoto, the United States is committed to enter into negotiations intended to produce a treaty that will set legally binding targets and a timetable for the reduction of greenhouse-gas emissions. In these negotiations, the United States appears to have accepted two conditions: First, quantitative emission limits will, at least initially, be applied only to developed nations and to those developing nations that agree to them. Second, the limits will specify that developed nations reduce emissions to 1990 levels at a yet-to-be-determined future time -- say, 2005 or 2010.

The United States stresses the importance of maintaining flexibility in the way each nation reaches its target and shows great interest in allowing international trading of unused emission amounts within the permitted level. There is also considerable interest in the concept of "joint implementation," whereby developed countries would obtain credits for investments in energy-efficient and emission-avoiding technologies in developing countries. These credits would permit developing countries to achieve industrial activity and economic growth with lower emissions than would otherwise be the case. Tradable international permits and "joint implementation" recognize the reality that the most attractive opportunities for cost-effective reduction of greenhouse gases are in the less-developed world.

The official U.S. position is a response in part to diplomatic pressure from Europe. European nations advocate adoption of targets below 1990 levels. Because of the collapse of industrial activity in Eastern Germany, the Soviet Union and other Eastern European countries since the end of the Cold War, adoption of a 1990 baseline provides a windfall to Germany, Russia and other countries by awarding them excess permitted emission levels. "Joint implementation" also likely would result in large capital transfers to China, which is running a huge trade surplus with this country.

Developing nations strongly believe that they should not bear economic costs associated with reducing greenhouse emissions they did not create. Their absence from the proposed convention makes adoption of any target levels by developed countries unacceptable.

But developing nations are not going to agree to any constraints at present. Even if they did, there is little prospect that many of these countries would or could enforce emission constraints. We cannot wait for significant narrowing of the national income gap between developed and developing nations to gain their commitment. By that time, these nations will be emitting more greenhouse gases than today's developed countries.

I suggest an alternative approach for the United States:

First, the administration places too much emphasis on reaching international agreement and too little on achieving the domestic consensus required for an effective control regime. The American public does not now accept the idea that global warming is a potentially significant environmental threat. A greater effort needs to be made to persuade industry and labor that current knowledge justifies some control measures, if only to establish the national and international mechanisms that might be needed if the more pessimistic climate effects prove to be true.

Second, the administration must increase attention to new technologies that are more energy efficient and less carbon dependent. While such research is unlikely to solve the global climate problem, the cumulative effect of innovation can lower the economic costs substantially. Such energy technology development inevitably must involve industry in a major way. The recent report of the President's Council on Science Technology is a step in this direction.

The experience in response to the oil crisis in America, Europe and Japan in the late 1970s and early 1980s should remind us of the difficulty governments have in carrying out sustained research, development and demonstration programs. We should not forget, however, that if the more pessimistic climate change estimates prove true, alternative energy technologies -- perhaps even nuclear-based ones -- will be needed urgently.

Third, the administration should propose an emission tax for this and all other industrialized countries on carbon and, where practical, on other greenhouse gases as well -- notably methane. The tax should at first be set at a level of about \$ 10 per ton of carbon emitted, yielding revenues of about \$ 10 billion a year. This tax would amount to less than 2.5 cents per gallon of gasoline, well below the \$ 100 per ton estimated to be required for a market response shift adequate to reduce emissions to pre-1990 levels.

The revenue raised from this tax should be used to reduce other taxes, or for three purposes: (1) to reduce the economic impact of job dislocation caused by the shift away from coal and other high-carbon fuels; (2) to fund "joint implementation" projects in the developing world that would reduce carbon emissions below what they would otherwise have been; and (3) to stimulate new energy-efficient technologies.

Several reasons favor a carbon tax over emission ceilings. A tax is easier to administer and to adjust up or down, depending on what is learned. And while a tax is sure to be unpopular with industry and labor, it is likely to be more popular than adoption of the emission targets. And beyond providing economic incentives, the tax would signal to industry the importance of reducing carbon emissions in the future. Finally, a tax would demonstrate U.S. resolve to deal with global warming and might prove easier to negotiate internationally with developed and developing countries than a binding emission ceiling.

A small carbon tax as an alternative to the national emission targets on the table for Kyoto would be a first step on

global warming that is more consistent with the state of scientific knowledge and the extent of international consensus -- and more likely to be politically acceptable to Americans.

The writer, an MIT professor and director of the Central Intelligence Agency from May 1995 to December 1996, was director of energy research and deputy undersecretary in the Department of Energy in the Carter administration.

LOAD-DATE: October 13, 1997

LANGUAGE: ENGLISH

GRAPHIC: Illustration, margaret scott

Copyright 1997 The Washington Post