

THE **KYOTO** PROTOCOL



JUST A LOT OF

The Kyoto Protocol on global warming is struggling to survive in a political climate hotter than the global climate it was intended to cool. Three years after being negotiated by 150 countries in Kyoto, Japan, in December 1997, this first attempt to set internationally binding limits on greenhouse gas emissions is about as far from its goal as it was the day it was conceived. Only 24 countries—all of them in the developing world—have ratified the protocol so far, excluding all the major powers that contribute the bulk of emissions worldwide. Members of the U.S. Congress have criticized the protocol because they feel it unfairly saddles the United States with most of the responsibility for emissions reductions while requirements imposed on developing countries are considerably more lenient. This view prevails among influential industry stakeholders who continue to lobby against the protocol's ratification by Congress.

But even as the Kyoto Protocol faces a steep uphill battle in Congress, a majority of both the public and scientific community

ring and that U.S. action is necessary to reduce greenhouse gas emissions.

These opinions are dividing what has traditionally been a united front of conservative officials and industry representatives who maintain that the science on global warming is inconclusive and that more study is needed to justify costly emissions reductions. These critics charge that climate science is based on computer models that are only crude approximations of real world conditions, and that the resulting scientific uncertainty about the interactions of various climatological factors must be acknowledged.

Recently, however, 21 multinational companies went on record stating that global warming is a threat that must be met with emissions reductions. Each of these companies belongs to an organization called the Business Environmental Leadership Council, administered by the Pew Center on Global Climate Change in Arlington, Virginia. Eileen Claussen, president of the Pew Center, says these companies, which include Shell, BP Amoco, and American Electric Power, have described the Kyoto Protocol as a “first

forge consensus around an incentive-based utility emissions reduction bill that addresses greenhouse gases.

One outstanding question is whether these shifting views on global warming will increase support for the Kyoto Protocol in Congress. Currently, the protocol is so contentious and so mired in partisan politics that ratification, at least in the short term, appears unlikely. But supporters are hopeful that a pivotal international meeting of protocol delegates, scheduled for 12–13 November 2000 in the Hague, the Netherlands, will ameliorate some of these differences and pave the way for its eventual success.

According to the theory of global warming, gaseous emissions from fossil fuel combustion, particularly carbon dioxide (CO₂), are building up in the atmosphere and trapping heat on the earth's surface, much like panes of glass trap heat in a greenhouse. Power plants, automobiles, and factories have emitted more greenhouse gases than the environment can absorb, leading to a 30% rise in CO₂ since preindustrial times and a 145% rise in another important greenhouse gas, methane. Backing the theory that global warming is already upon us are data showing that the 1990s were the hottest decade of the last millennium. Painting an ominous picture of the future, a draft report titled *Climate Change Impacts on the United States: The Potential Consequences of Climate Variability and Change*, issued by the U.S. Global Change Research Program on 12 June 2000, predicts an increase in global temperatures of 5–10°F over the next century. (This is in contrast to the 1996 prediction by the Intergovernmental Panel on Climate Change upon which the Kyoto Protocol was based, which estimated temperature increases of 2–6°F.) Global warming on this scale could produce tremendous environmental impacts, especially to coastal areas, which would be affected by rising sea levels and increased storm surges, and some island nations, which could be wiped out altogether.

HOT AIR?

believe that global warming is not only real but happening now. Faced with steady news reports of melting Antarctic glaciers and extreme weather patterns, 60% of the American public subscribes to this view, according to a 1998 survey by the World Wildlife Fund. Furthermore, a March 1999 survey conducted by the Mellman Group, a Washington, DC–based polling organization, found that 76% percent of 450 congressional officials, industry association leaders, media representatives, economists, scientists, and policy experts think global warming is occur-

ing and that U.S. action is necessary to reduce greenhouse gas emissions.” And while refraining from supporting the Kyoto Protocol itself, several powerful Republicans are suggesting that the threat of global warming needs to be taken seriously. These include Senators John McCain (R–Arizona), chairman of the Senate Commerce Committee, who launched a full-scale investigation into the science behind global warming on 17 May 2000, and Bob Smith (R–New Hampshire), the new chairman of the Senate Environment and Public Works Committee, who is attempting to

The Kyoto Protocol—What It Is

The origins of the Kyoto Protocol date to the United Nations Conference on Environment and Development (the so-called Rio Earth Summit), held in Rio de Janeiro, Brazil, in 1992. This meeting produced the United Nations Framework Convention on Climate Change (UNFCCC), a document signed by 150 countries



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and subsequently ratified by the U.S. Senate that sought to “achieve . . . stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference in the climate system.” The UNFCCC split the world into two halves: Developed countries, including the former Soviet Union, the countries of Eastern Europe, and those belonging to the Organisation for Economic Co-operation and Development (including the United States) were designated Annex I Parties. The remaining 129 developing countries, including China, Mexico, India, Brazil, and South Korea, were designated non-Annex I Parties.

As a follow-up to this original treaty, the Kyoto Protocol was drafted at the Third Conference of the Parties to the UNFCCC (COP3) in December 1997 and marked the first international attempt to place legally binding limits not only on CO₂ but five other greenhouse gases as well: methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. The protocol’s specific goal is to reduce combined emissions among Annex I countries by approximately 5% from 1990 levels by a 2008–2012 time frame. Each Annex I country is assigned a specific emissions reduction target. The target for the United States, for example, is 7%. Consistent with the terms of the UNFCCC, developing countries are not bound to emissions limits, but rather are dealt with through the controversial “clean development mecha-

ing” between industrialized nations. In this scenario, a nation whose emissions fall below its treaty limit can sell credit for its remaining emissions allotment to another nation, which can in turn use the credit to meet its own treaty obligations.

Sources of Conflict

Protocol critics claim that developing countries will be the largest contributors of greenhouse gases within the next 15 years due to industrialization, deforestation, and increasing use of vehicles in those nations. Because the protocol imposes no binding reduction targets on these countries, its critics in the United States say it will fail to reduce global emissions while causing harm to the economies of the developed world. Claussen, who calls this roadblock “the fairness issue” (referring to the question of whether it is fair that the developed countries should bear the economic brunt of emissions reductions if they aren’t the major contributors), counters that rather than justifying minimal action, fairness actually demands decisive U.S. action to reduce emissions for two reasons. First, developed countries are currently and historically



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impossible for them to take on reduction targets within the same time frame as developed countries. And I’m not sure that it’s ethical, either.”

Many in Congress have traditionally been reluctant to buy in to this argument. In July 1997, months before the Kyoto Protocol was signed, Senators Robert Byrd (D–West Virginia) and Charles Hagel (R–Nebraska) introduced a resolution that the United States shouldn’t sign any treaty limiting or reducing greenhouse gas emissions for the Annex I Parties unless the protocol or other agreement also mandated commitments for developing countries within the same time period. Furthermore, this Byrd-Hagel resolution, as it came to be called, prohibited the signing of a treaty that might “result in serious harm to the economy of the United States.”

The Byrd-Hagel resolution was passed by a unanimous vote in the Senate. But in a move that still rankles the protocol’s critics (while delighting environmentalists), Vice President Al Gore went to Kyoto during the final hours of COP3 and instructed U.S. delegates to show more flexibility in agreeing to the terms of the protocol, the stated opposition of the Senate notwithstanding. The protocol was subsequently signed by the United States at COP4 in Buenos Aires, Argentina, in 1998. Signing the protocol merely indicates intent to comply. Ratification is the process that commits a country to treaty provisions. Conservative stakeholders have argued that Gore’s actions helped turn the Kyoto Protocol into a partisan issue, and that furthermore the vice president acted without the full support of the Clinton administration, which they claim never intended to endorse the protocol’s mandated emissions targets. Says David Garman, chief of staff for Senator Frank Murkowski (R–Alaska), “The protocol was signed even though the Senate didn’t want it signed. This has created a lot of ill feelings in the Congress to the extent that some creative energy policies aren’t being adopted because they are viewed as premature implementation of Kyoto provisions.”

One particularly vociferous critic, Representative Joseph Knollenberg



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nism” (CDM), which allows them to receive pollution reduction credits by permitting industrialized nations to finance projects that reduce emissions within their borders (the industrialized nations undertaking the activities also receive credits). The Kyoto Protocol also sanctions the concept of “emissions trad-

responsible for more emissions than anyone else; second, developed nations can afford to pay the associated costs. “But there’s no question that developing nations will eventually need to reduce their emissions,” she adds. “It’s also in our interest that they have clean development. However, it would be

(R-Michigan), has tried to block any federal spending on CDM and emissions trading programs, describing them as unauthorized Kyoto provisions that ignore the Byrd-Hagel resolution. Says Knollenberg, “To spend taxpayer dollars on carbon emissions trading and clean development mechanisms is against the Constitution and a bypass of the law. The White House could send the Kyoto Protocol for ratification by the Senate, but they know it won’t pass so they try to implement it through a back door.”

Earlier this year, Knollenberg attached language to a number of federal spending bills that stated in part, “Hereafter, no funds shall be used for the Kyoto Protocol, including such Kyoto mechanisms as carbon emissions trading and the clean development mechanism that are

found solely in the Kyoto Protocol and nowhere else in the laws of the United States.” This language was ultimately abandoned due to pressure from environmentalists, moderates in Congress, certain industry sectors, and eventually even the Republican leadership in favor of existing language (also authored by Knollenberg) that simply forbids using federal funds for Kyoto implementation without Senate ratification.

Both the U.S. Environmental Protection Agency and the White House have argued that, as long as they don’t issue rules specifically implementing the protocol, they are free to explore options to address global warming. Consequently, a number of federal agencies are exploring the CDM and emissions trading for their own programs. For example, the U.S. Agency for International Development is engaged in several projects investigating the use of the CDM in developing countries, including India, Brazil, and countries in Central and South America. And Smith is developing an incentive-based utility emissions reduction bill that could include emissions trading provisions for CO₂—a potentially controversial measure because opponents could suggest that the measure is an attempt to implement the protocol through the back door. Armond Cohen, executive director of the Boston, Massachusetts-based Clean Air Task Force, a national environmental organization that has provided Smith’s committee with recommendations for the proposed legislation, says that, if passed, Smith’s approach could create an appropriate legislative mechanism for regulating CO₂. “I don’t think this bill represents Kyoto implementation,” he adds. “Rather than the 7% cap mandated by the protocol, we’ve suggested the cap be set at 1990 levels, which was established during the Rio Convention that the Senate ratified. We’ve

also proposed 2005 as the return date. This isn’t inconsistent with the Kyoto Protocol, but it’s not an endorsement, either.” Garman notes, however, that the emissions cap suggested by the protocol is a voluntary goal, whereas the Smith approach entails a legally binding statutory provision.

Another heavily debated aspect of the Kyoto Protocol concerns the costs of implementation, which critics say place unaccept-

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able economic burdens on some industry sectors. Knollenberg, for example, has suggested that implementing the Kyoto Protocol would result in the loss of 2.4 million jobs and reduce the average annual income by nearly \$2,700. But Dan Lashof, a senior scientist with the Natural Resources Defense Council in Washington, DC, counters that these kinds of cost estimates are based on complicated economic models that are heavily dependent upon input parameters. Lashof says studies that incorporate the benefits of increased energy efficiency and reduced dependency on foreign oil, among other parameters, show that Kyoto emissions reductions could be achieved while actually increasing employment

and saving money for consumers. To illustrate, he cites the World Wildlife Fund’s August 1999 report *America’s Global Warming Solutions*, which finds that compliance with the Kyoto Protocol entirely through domestic action could create 900,000 new jobs and reduce energy bills by nearly \$400 per household.

A Critical Meeting for Party Delegates

The definitions and rules for implementing the CDM and emissions trading, as well as a number of other important protocol-related issues such as how deforestation and forest protection influence global warming, will be discussed at COP6 in the Hague this November. This session will establish the ground rules for implementation of the

Kyoto Protocol and will be the most important session since the protocol was adopted in 1997. According to a UNFCCC fact sheet, COP6 will be considered successful if it triggers ratification among Annex I countries in sufficient numbers to bring the treaty into force and if it “motivates significant action by developing countries to enhance their contributions to the achievement of the convention’s objectives.”

Whether COP6 is likely to produce any changes that increase chances of congressional ratification in the United States is a matter of debate. Says Lashof, “I’m optimistic that the United States will ratify the protocol. I think that COP6 marks the beginning of serious consideration. It’s something that

won’t happen immediately, but it begins a process that will lead to ratification in the next few years.”

Other stakeholders are not so sure. “I’m sure there will be an effort to repackage the agreement as having meaningful developing country participation and reliance on market mechanisms,” says Garman. “But I don’t think it will sell. It takes 67 votes to ratify the protocol, and so far I only see about 20.”

Ultimately, a number of important questions remain. Will the rest of the Annex I countries ratify the protocol even without

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United States participation? Can the protocol achieve its goals if the United States doesn’t buy in? And finally, is it appropriate to pursue emissions reductions through a binding international treaty rather than through voluntary market-driven incentives? In response to this last question, Lashof points out that U.S. greenhouse gas emissions rose by 12% during the last decade, despite pledges to stabilize emissions at 1990 levels made at the Rio Earth Summit. Perhaps the only certainty is that if current global warming predictions prove correct, the next century will give rise to a radical transformation of our planet. Certainly any actions that could help reverse this trend are to be taken seriously.

Charles W. Schmidt