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CONFERENCE OF THE PARTIES MEETS IN BERLIN

Executive Director's Column

DEBATE HEATS UP FOR BERLIN CONFERENCE

By John Shlaes

The next phase of negotiations on the climate treaty will occur in Berlin from March 28 through April 7. The meeting, the first Conference of the Parties (COP-1), has turned up the volume on the public discussion surrounding the Framework Convention on Climate Change (FCCC).

The German government considers the Berlin meeting one of the major events following reunification, and the German "green" party, which has considerable government influence, has for months attempted to focus German and European attention on the meeting. Interestingly, the German Environment Minister recently visited the United States in an attempt to convince the U.S. government to support new mandates and obligations to reduce manufacturing emissions.

Up until now, the climate negotiations have been relatively free of such outside influences. At the six previous "interim" sessions since the adoption of the convention in May 1992, Intergovernmental Negotiating Committee (INC) negotiators were alone in developing recommendations on how the COP should address issues regarding administering the treaty.

However, it is anticipated that Berlin also will host over 230 environmental, social, youth, church and other organizations. These groups will participate in a series of conferences, seminars, art shows, concerts and exhibits sponsored by KLIMAFORUM '95, the NGO group organized by the German League for the Protection of Nature and the Environment and the Berlin Green League.

The purpose of the "Rio" type NGO activity during the Berlin meeting will be to create external public pressures on the delegates, and to force additional and binding agreements. One such effort will be the convening of "The Greenhouse Gathering," which is billed as an NGO counterpart to the Berlin Climate Summit.

Organizers of this event have said, "We demand real progress in the climate negotiations, and we are not willing to let politicians play with our future...As a first step, we demand a binding protocol for a 20 percent CO_2 reduction by 2005 for industrialized countries." They are also pursuing an evolving environmental theme: "We need a radical redefinition of the Northern concept of development."

Make no mistake, Berlin will be high stakes. But the real action will take place inside the international conference center, where over 100

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FORECASTING EXPERTS FIND NO RISE IN EXTREME WEATHER

There has been no increase in weather-related natural disasters, according to a report issued in February by Accu-Weather, the world's leading commercial weather firm.

The authors credit the perception of increased extreme weather events to several factors: more people live in areas that were once sparsely populated or even uninhabited; local media are now able to quickly report extreme weather events in distant parts of the globe; and, science has developed new tools such as satellites and improved computer technologies, so more events are being covered.

In the study entitled, "Changing Weather? Facts and Fallacies About Climate Change and Weather Extremes," Accu-Weather meteorologists refute the claim that there has been a dramatic increase in extreme weather events as a result of human activity. In addition, they support the findings of most climate experts that the slight increase in global temperatures during the last century (about one degree Fahrenheit) is well within the range of natural variability.

The authors, Norman Macdonald, M.S., Certified Consulting Meteorologist, and Joseph Sobel, Ph.D., Senior Vice President of Accu-Weather, credit the Earth's climate changes over geological time to natural variations in the Earth's climate, caused by factors such as the sun's strength, the Earth's orbit and volcanic action.

"While it is impossible to answer these questions unequivocally, studies of observational data and an understanding of the theoretical issues of climate do offer some insight. Put briefly, while climate does change, man's activities do not appear to be a significant agent of change," the authors say.

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Private Sector Achievements Lauded by Clinton Administration

Voluntary private sector cooperation works! The Clinton Administration reports significant progress by voluntary company actions to help reduce U.S. greenhouse gas emissions to 1990 levels by the year 2000.

In a paper released at the Intergovernmental Negotiating Committee (INC) meeting in New York in February, the accomplishments of the President's Climate Change Action Plan (CCAP) were detailed as part of the U.S. effort to reduce greenhouse gas emissions.

In the preamble to the paper, the Administration states it is facing the issue of climate change with "cost-effective policies" based on the "three pillars" of sound science, partnerships with the private sector, and "international solutions."

In addition to the voluntary programs described on page 4:

- New grants to 18 states and one local NGO have been awarded by the State and Local Outreach Program. In total, 24 states have participated in the Program.
- CCAP recently approved seven joint implementation projects to encourage wind energy, fuel switching, energy efficiency, and improved forest management in developing countries and those in transition. An apparent byproduct of the CCAP is an expected energy savings of $60 billion by the year 2000.

U.S. Research Effort

The CCAP paper also outlines the accomplishments of the U.S. contribution to the IPCC, which is funneled through the U.S. Global Change Research Program (USGCRP), and funded to the amount of $2.3 Billion in FY 1995. This program coordinates the resources and research activities of a dozen federal agencies as well as the U.S. participation in the World Climate Research Program.

Recent accomplishments include:

- Redesign of the Earth Observing System satellites to enhance the monitoring of possible climate changes. The first satellite in this series is scheduled for launch in 1998.
- Collection of data on which type of clouds trap infrared radiation.
- Modification of climate models to reflect deep ocean mixing and sulfates released through human activity and the volcanic eruption of Mt. Pinatubo.
- Improvement in the ability to forecast the El Niño Southern Oscillation phenomenon for agricultural planning purposes.
- Establishment of a Climate Simulation Laboratory to improve climate modeling.

Source: Climate Change (February 1995) Environment Division, Office of Science and Technology Policy, White Ho

Extreme Weather

Continued from front page

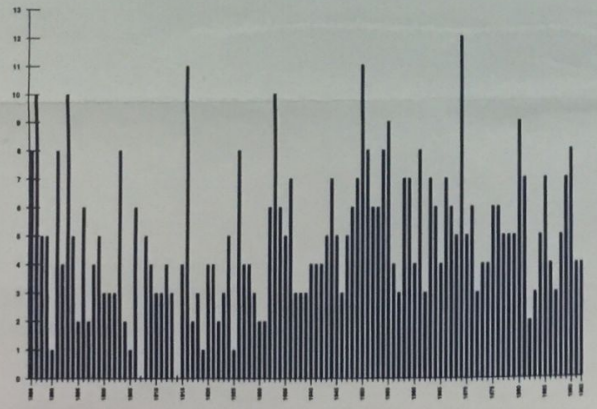
They also concur with the finding that most of the temperature increase over the past century occurred before 1940, while the majority of greenhouse gas emissions occurred well after 1940.

The report was prepared at the request of the Global Climate Coalition. Accu-Weather is a full-service weather company which provides specialized forecasts, graphic displays, maps and other weather data to over 6,000 clients around the world. The State College, PA-based firm also offers Accu-Data, a comprehensive weather database.

The firm gathers weather-related data 24-hours a day from high-speed data lines and satellite receivers from observation stations worldwide. They also rely on full-time, on-line output from the National Weather Service Computer Center, the World Meteorological Organization and the European Centre for Medium-range Weather Forecasts.

Copies of the report may be obtained by contacting the Global Climate Coalition, (202) 628-3622.

Number of Tropical Storms Which Eventually Became Hurricanes



Provided by the National Weather Service, this data shows that the number of North Atlantic hurricanes has not increased significantly in recent years. The advent of satellites and other methods have increased the effectiveness of locating and tracking storms during the past two decades. Therefore it is possible that the number of tropical storms may have decreased in recent years as many storms reported today may have gone unnoticed 50 to 100 years ago.

Berlin Conference

Continued from front page

countries will be holding their first administrative meeting to decide what measures should be adopted to further implement the climate treaty. There are two fundamental views coming out of February's United Nations deliberations at INC-11 in New York: one view, promoted primarily by the Europeans and the United States, says that nations need to go further than called for in the existing treaty; the other view, put forth by several developing countries, says that the current provisions of the FCCC are adequate, and need to be more fully implemented.

To better understand the issues in Berlin, we need to look at the key issues debated in New York that the Parties will revisit in Berlin: 1) adequacy of commitments, 2) consultative bodies, 3) joint implementation, 4) methodologies, and 5) rules of procedure. Adequacy, consultative bodies and joint implementation are the issues of most concern.

On adequacy, the United States stated its position that the treaty was inadequate, but added that new aims should be negotiated for the post-2000 period by 1997. This was worrisome since the European Union (EU), supported by member states such as Germany, the Netherlands and Switzerland, called for the negotiation of a new protocol (in essence a separate binding agreement). Ever assertive, Germany called for "targets and timetables" as well as new "policies and measures," a position representative of the European view. One possible target could be a call at COP-1 for "Annex I parties (developed countries) to stabilize their CO_2 emissions, individually or jointly at 1990 levels by the year 2000." Another European objective is the development of a post-2000 mandate to reduce emissions even further, with support for the Alliance of Small Island States (AOSIS) protocol which parallels the "Toronto Target," calling for stabilizing atmospheric concentrations of CO_2 and recommending a 20 percent reduction in emissions from 1988 levels by the year 2005 as an "initial global goal." Their goal is to harmonize national climate protection policies and measures of individual countries,"

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and "...broader application of economic instruments" (such as international carbon taxes).

The Chinese and several countries from the Group of 77 (G-77), now up to 124 developing countries, strongly objected to this arbitrary and aggressive approach. The Philippine representative and Chairman of the G-77 said:

"Are the Group of 77 and China against improving the Convention? By no means. But first things first. Implement now. Discuss ways of improvement well in advance. But active negotiations for....amendments of the Convention should take place only when we are sure that even the present commitments....can realistically be met."

> ***"To . . . embrace new mandates would hurt the United States . . . the most."***

Another issue of significance was a move to set up sectoral industry technical panels and consultative bodies — with some wishing to bind those bodies to implementation of the Convention. Ultimately, the delegates agreed to a workshop where industry would participate with others to establish a "process" for the participation of industry.

Joint Implementation (JI) was the subject of lengthy and vociferous debate. The United States, and to a lesser extent the EU countries, pushed for a JI pilot program for "all countries." The G-77 and China indicated they could support a JI pilot program only if it consisted of developed countries alone. Little progress was made, but three papers were sent on to COP-1 — one from the United States, one from the European Union and one from the G-77.

The New York INC-11 session closed with many questions left unresolved and open for a great deal more debate.

Industry too, left asking the same questions it asked the United States and others during the months leading up to INC-11 and COP-1 — Why the hurry to negotiate new measures and agreements? The Intergovernmental Panel on Climate Change and others readily admit there is much more information required on the science. Few countries have provided consistent and complimentary data on their basic energy and economic circumstances, or on emissions scenarios. Only 18 of 36 developed countries have submitted national action plans so far and data differ widely or are inadequate for analysis. Moreover, no credible economic analyses on the impacts of treaty provisions have been undertaken — a strong treaty proviso.

So where does this leave us as we approach Berlin? Well, we know the environmentalist NGOs will be pulling out "all the stops" to persuade the delegates to adopt new mandates and regulations. We also know that delegates hold widely divergent views — in many cases because the treaty is only 11 months old, and also because several nations are unsure of the impacts, should calls for dramatic new initiatives be adopted.

We also know that the U.S. economy is particularly vulnerable to an aggressive new target. U.S. industry, though extremely efficient, cannot afford, nor can its customers or employees afford, the precipitous limitation of growth that dramatic new "targets and timetables" would bring. Also, the United States would be less economically competitive if it had to accommodate worldwide standardization of regulation — we are already the most regulated country in the world. We and others who have to live with the international political and economic implications of the climate treaty have said time and again to the U.S. negotiators: "Let's implement the existing treaty. Much needs to be done to gather data, evaluate the science and economics, and to explore joint projects." To go beyond that and embrace new mandates would hurt the United States, of all countries, the most.

International News Update

European Floods Not Linked to Global Warming

There is no evidence that the devastating floods which recently struck northwestern Europe are linked to global warming. "The floods are an exceptional event, but I don't think anyone could relate them to climate change at this point," said Roger Newsom of the World Climate Research Programme in Geneva, Switzerland.

Newsom is in agreement with Andrew Goudie, professor of geography at Oxford University who believes that it is too soon to tell if there is a relationship. "We need a much longer perspective to assess if it is real evidence of climate change," Newson said. "As we look back in a year or two's time we may see this particular winter as an important long-term pointer. However, the slight increase in temperature is well within the range of natural variability."

Norman Lynagh, managing director of Noble Denton Weather Services in London said, "We need another 20 or 30 years of experience. It's not something you can measure that easily. A typical global warming prediction calls for the mean temperature rising one or two degrees Celsius. But weather is so unpredictable and temperatures can far exceed that, up or down, in a year," he said. Over the past century, the mean temperature has only risen one degree Fahrenheit.

The environmental group, Friends of the Earth, also hesitates to claim global warming.

"There's no conclusive proof that climate change is happening," according to Anna Stanford, Friends of the Earth assistant energy campaigner.

Source: Reuters (2/2/95)

Carbon Taxes Fail in First European Tests

Initial experimentation with carbon taxes in Europe has shown that they have a negative impact on a nation's economy, add to the complexity of the tax system, are difficult to enact and require trade-offs.

In the four nations where they were instituted (Belgium, the Netherlands, Norway and Sweden), the Organization for Economic Cooperation and Development (OECD) reported that the energy taxes were largely counterproductive.

The most important criteria was whether the tax hurt industrial competitiveness. After two years, the Swedish government exempted industry from the energy tax and granted a 75 percent exemption from the CO_2 levy while increasing taxes on households to make up for the shortfall.

Norway granted exemptions of 40 percent for CO_2 emissions and 60 percent for sulfur dioxide from the very beginning.

The Netherlands enacted an across-the-board energy tax last year, but cushioned large consumers by placing more of the burden on small users. The OECD reported the negative impact on the economy to be high because industrial firms left the country as a result of the tax.

Belgium's industrial competitiveness suffered because of the nation's proximity to European nations which don't have energy taxes, and its relatively small size.

The purpose of the study was to assess how national guidelines for the taxation should or should not be designed for other member states of the European Union.

Source: Environmental Information Networks 1/30/95

Energy Use and Carbon Emissions: Top Ten Non-OECD Countries, 1992

Country	Carbon Emissions (million metric tons)	Cumulative Non-OECD Total (percent)	Energy Demand (quadrillion Btu)	Cumulative Non-OECD Total (percent)
Former Soviet Union	866.1	28.6	51.2	31.5
China	673.1	50.8	29.2	49.4
India	177.4	56.6	8.5	54.6
South Africa	106.5	60.1	4.5	57.4
Poland	92.1	63.2	4.0	59.8
Mexico	91.9	66.2	5.1	63.0
South Korea	91.3	69.2	4.9	66.0
Brazil	70.5	71.5	6.1	69.7
Saudi Arabia	63.5	73.6	3.5	71.9
[illegible]	61.6	75.7	3.4	74.0

Energy Demand Jumps in Developing Countries

Approximately half of the world's energy consumption and carbon emissions in 1992 were generated by developing nations and those with former centrally-planned economies, according to a recent U.S. government report. Energy consumption in countries such as Russia, India and China reportedly grew at a much faster rate than those in the developed nations.

These findings were reported in "Energy Use and Carbon Emissions: Non-OECD Countries," released earlier this year by the Energy Information Administration of the Department of Commerce. A more dramatic discovery is that between 1970 and 1992, energy consumption grew 121 percent in the non-aligned nations, representing 84 percent of the world's population, compared to 36 percent in the developed countries comprising the Organization For Economic Cooperation and Development (OECD). At the same time, carbon emissions grew by 99 percent in the non-OECD countries compared to only 24 percent by

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America's Utilities Accept "The Climate Challenge"

Over 200 utilities have signed commitments to reduce greenhouse gas emissions under the Climate Challenge, the new initiative unveiled by the Department of Energy and the electric utility industry.

Kurt Klunder, head of the Technical Assistance Team for Climate Challenge at DOE told *Climate Watch*, "We believe we have a substantial contribution to meeting the Administration's goal of reducing carbon emissions by the year 2000 to 1990 levels. We are especially pleased that many of the larger utilities have stepped forward to provide leadership. This demonstrates good citizenship as well as sound business efforts to improve the efficiency of their operation."

Under Climate Challenge, companies sign individual agreements with DOE detailing not only how they will reduce emissions, but what levels of reduction they expect to achieve.

Klunder noted that there have been three signing ceremonies with company officers and the Secretary of Energy. The first on January 17, involved 11 members of the Large Public Power Council. On January 30, over 20 companies and affiliations in the American Public Power Association signed an agreement. They represent approximately 150 individual, largely municipal utilities. On February 3, over 35 investor-owned utilities affiliated with the Edison Electric Institute (EEI) agreed to do their part.

The DOE spokesman said that planning is in the works for a ceremony with members of the National Rural Electric Cooperative Association to complete coverage of the industry.

Klunder said existing commitments represent over 40 million metric tons of greenhouse gas savings by the year 2000. This is a significant step in reaching the goal of 108 million metric tons of carbon reduction annually by the year 2000. Companies signing the agreement have made one or more of the following types of specific commitments:

- Contribute to a particular industry initiative (see table below).
- Reduce greenhouse gas emissions by a specified amount, including below or to the utility's 1990 baseline by the year 2000.
- Reduce or limit the emission rate.
- Undertake specific projects to reduce greenhouse gas emissions.
- Report annually on their activities and achievements.

EEI has also led or supported the development of five additional programs in which utilities can participate on behalf of the industry. These addre electrotechnologies and renewable energy, forest carbon management, international energy projects, geothermal heat pumps and electric vehicles.

For more information about the Climate Challenge, contact Allan Hoffman, Program Director, (202) 586 1786. For general information about the emission reduction programs offer by DOE, call (800) 363-3732. For details on EEI's participation, call Pete Jump at (202) 508-5657.

Energy Renewal and Efficiency Goes "On-Line"

You can now access information about energy efficiency and renewable energy on the Internet. Dubbed the Energy Efficiency and Renewable Energy Network (EREN), this on-line service allows users to call up data from the Department of Energy (which created the network), national laboratories, federal and state government agencies, utilities, non-government organizations and commercial sources. There is no charge for the service.

The information encompasses all aspects of the energy industry, from scientific theories to manufacturing specs.

The network is accessed by inputting http:// www.eren.doe.gov.

Energy Partnerships For A Strong Economy

These are among the approximately 50 voluntary programs established by the Department of Energy (DOE), Environmental Protection Agency (EPA) and the Department of Transportation (DOT) to help the nation reduce the levels of greenhouse gas emissions.

Green Lights

A program to upgrade lighting fixtures with more energy efficient replacements. It also promotes the use of motion sensors for use in largely unoccupied rooms. Over 1600 companies, utilities, local governments, hospitals and schools have signed up for the EPA-administered program since it was established in 1991.

Climate Challenge

Over 800 electric utilities representing 80 percent of U.S. generating supply have joined DOE's Climate Challenge to reduce greenhouse gas emissions.

Climate Wise

Focuses on reductions in industrial greenhouse gas emissions through energy efficient techniques, renewable energy and pollution prevention.

Motor Challenge

Two hundred and ten firms have joined Motor Challenge to improve energy efficiency, productivity and environmental performance.

Waste Wi$e

Targeted at reducing and recycling business waste, Waste Wi$e has attracted 300 businesses with over 750 programs underway.

Natural Gas Star

A program to reduce methane losse from gas lines and coal mines, more than 55 percent of transmission company pipeline miles, 25 percent of distribution company pipeline miles, and 35 percent of all service connections under the auspices of 35 companies are now involved in Natural Gas Star.

Berlin Conference

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EPRI Honored for Work in Climate Modeling

As a result of developing the Model Evaluation Consortium for Climate Assessment (MECCA), the Electric Power Research Institute (EPRI) was named the 1994 recipient of the American Meteorological Society's Award for Outstanding Service to Meteorology by a Corporation.

The international climate consortium's goal is to examine the reliability of climate predictions from modern theoretical models. The award was announced at the Association's 74th annual meeting, held in January 1994 in Nashville, TN.

"Four years ago, EPRI started to promote the use of super computing capabilities to explore and visualize solutions to environmental problems," said EPRI President and CEO, Dr. Richard Balzhiser. The project has provided a multi-year leap forward. Before the Consortium's project, it took two or three years to complete 100-year forecasting experiments.

"Thanks to super computing laboratories dedicated solely to climate modeling, it now is done in a manner of months," said Dr. Chuck Hakkarinen, manager of the project at EPRI and technical committee chair of the Consortium. "This work has very significantly advanced the linking of global climate geoscientists and climate simulation modelers," he continued.

In addition to EPRI, the Consortium includes the National Center for Atmospheric Research (NCAR), a consortium itself of 61 U.S. and Canadian universities; the National Super Computing Center for Energy and the Environment at the University of Nevada, Las Vegas; the Central Research Institute of Electric Power Industry, Tokyo; The Italian Agency for New Technologies, Energy and Environment, Rome; Electricite de France, Paris; KEMA, The Netherlands; Southern California Edison; and, the US EPA.

For further information, contact Chuck Hakkarinen at EPRI, (415) 855-2592, or write, P.O. Box 10412, Palo Alto, CA 94303.

Developing Countries

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OECD members. Were it not for the economic collapse of the former Soviet Union and Eastern European economies after 1990, the percentage gain would have been even higher.

Ten of the non-OECD nations (see chart on page 3) made up 38 percent of the world's carbon emissions. The former Soviet Union and China accounted for half of the energy demand and carbon emissions from the non-aligned countries.

Alternative energy sources showed increases during this period with non-OECD countries increasing from 4 percent in 1970 to 9 percent of total energy use in 1992. In the aligned nations, the use jumped from 7 percent to 16 percent over the same twelve-year period. Most of the increase, in both regions, was due to nuclear power.

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